1	PUBLIC HEARING FOR THE
2	DEWEY-BURDOCK UNDERGROUND
3	INJECTION CONTROL DRAFT PERMITS
4	AND PROPOSED AQUIFER EXEMPTION
5	
6	
7	May 10, 2017
8	1:00 p.m. to 8:00 p.m.
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10	The Mueller Center
11	801 South Sixth Street
12	Hot Springs, SD 57747
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1 REGIONAL JUDICIAL OFFICER SUTIN: 2 afternoon, everyone. Thank you for coming 3 today. My name is Elyana Sutin, and I am the Regional Judicial Officer for the Environmental 4 5 Protection Agency in Denver, Colorado. Again, 6 thank you all for coming. 7 I will be chairing the hearing today. 8 in addition to myself, there are other EPA staff 9 here to assist in this hearing to ensure 10 everyone who wants to speak has the opportunity 11 to do so. I'd like to introduce these folks before we 12 13 get started: Douglas Minter. Can't see 14 Douglas. Are you here? 15 AUDIENCE MEMBER: He stepped out for an 16 interview. REGIONAL JUDICIAL OFFICER SUTIN: Oh, he 17 18 did. Okay. We'll get to Douglas in a second. 19 Valois Shea is to my right. Valois is in 20 the Underground Injection Unit in the Office of 21 Water Protection at the EPA. 22 Lynne Newton is standing back at the 23 registration table. She's also in the Underground Injection Unit in the Office of 24 25 Water Protection.

Lisa Vanderpool-McClain, who is standing back in the other corner, Lisa is our Public Affairs Specialist in the Office of Communication.

And Sisay Ashenafi -- I don't see -- he's not here? Okay. So he is also -- will be standing in the back of the room. He's our Community Involvement Specialist, and we'll introduce him later.

On March 6, 2017, EPA issued two draft
Underground Injection Control, or UIC, area
permits to Powertech USA, Inc., for injection
activities related to uranium recovery near
Edgemont, South Dakota.

The draft permits include a UIC Class III area permit for injection wells for the in-situ recovery of uranium, and a UIC Class V area permit for deep injection wells for disposal of treated in-situ recovery process waste fluids.

The EPA is also proposing an aquifer exemption approval in connection with the draft UIC Class III area permit. We are here today to listen to your comment on these area permits and aquifer exemption.

The public comment period is open until

May 19, 2017. In addition to this hearing, there will be one more hearing tomorrow in Edgemont, South Dakota at the St. James Catholic Church.

We have held four other hearings, one in Valentine, Nebraska, and two days of hearings in Rapid City on Monday and Tuesday.

In a moment, Ms. Shea will explain in more detail what was proposed in the notice. But before I turn it over to her, I would like to take a moment to explain a bit about how today's hearing will work.

We will take testimony from 2:00 until 5:00 with a possibility of a short break -- we'll see -- and then a break from 5:00 to 6:00, returning to take testimony from 6:00 to 8:00. I will call speakers to the microphone.

You have the choice of coming to this podium up here to speak, or if you feel more comfortable, you can use the podium down here below, and we'll hand you the microphone. You come to the microphone after I've called your name from the registration card that you filled out. When it is your turn to speak, please state your name before you begin your testimony.

In order to be fair to everyone, we will limit your testimony to five minutes each. We will signal to you when you have one minute left to speak with a yellow triangle. And then when your five minutes is past, I will ask you to complete your testimony, and there will be a red stop sign.

Please try to be as succinct and on point as you can. If I find we are straying from the topic at hand, I will interrupt and ask that you please return to the issue before us. If we have time at the end and everyone has had the chance to speak and you have more to say than the five minutes you were given, then I will allow people to get back up and finish their comments.

After you finish your testimony, members of the panel may ask clarifying questions. I want to be clear that we are not here today to explain the basis for this proposal or to engage in back-and-forth discussion. The notice does that.

The purpose of the hearing is to receive your input. We will consider and then respond to all comments received during this hearing as

well as all written comments in the final permits and aquifer exemption determination. We will not be answering any questions during this hearing.

We are recording the hearing today, so be assured that your comments will be considered. The court reporter sitting to my left will be preparing a transcript of today's proceeding that will be available for anyone who wants to see it.

She is an independent contractor to the EPA and therefore may not be looking at you while you're giving your testimony. But be assured she is intently taking down every word.

The transcript is part of the record and will be included in the docket for this matter. The docket is where EPA collects materials it has considered in its action, including public comments.

The docket is available on the internet for review, or you can view a hard copy at EPA's Denver office. The transcript of this hearing will also be available in the docket.

If you have written copies of your testimony, please give a copy to our staff at

the registration table, or you can hand it to us. This will be helpful as we prepare the transcript.

If you have written comments or supporting documentation, you may leave those with us as well, and we will make sure they are entered into the docket for this proposed action.

You also may submit written comments directly to the docket through May 19

Instructions for submitting comments can be found at the registration table.

Once the final permits are issued and the aquifer exemption determination has been made, anyone who participated -- participated in the hearings, either through oral testimony or written comment, has the right to appeal the Agency's decision to the Environmental Appeals Board.

Before I turn it over to Valois, I'll introduce Douglas Minter, who is the manager of our Underground Injection Unit in the Office of Water Protection.

And did Sisay come into the room? No.

Okay. So at this point, I will turn it over to Ms. Shea, who will provide a little bit more

information on the project before we get started.

MS. SHEA: Good afternoon. Can you hear me?

Good afternoon, everyone. Thank you for

coming. We really appreciate your attendance

here and providing comments.

As Judge Sutin said, we have issued two types of underground injection control permits based on the type of injection and the purpose for injection.

The Class III injection well permit is for injection related to uranium ore recovery in the Inyan Kara group aquifers. In association with this permit, there's a proposed aquifer exemption decision that's been documented in the record of decision. We're also taking comments on that, as well as the draft permit conditions for the Class III injection wells.

The second permit is for the deep Class V injection wells, and they are Class V because they are injecting above the Madison aquifer. But because it is a deep well and because the Madison aquifer is just the next formation down, the permit has the most stringent well construction requirements and monitoring

requirements under the UIC regulations.

So the well construction will be constructed like a Class I well and will have continuous monitoring like a Class I well.

We also generated three different types of -- three additional types of documents. One is an Environmental Justice Analysis that we welcome your review and comment on. We received some good comments from that yesterday and hope to -- now that I've called your attention to that document, hope you will have time to look at it and provide some more comments.

We did a Cumulative Effects Analysis document for the construction and operation of the injection wells. And then our third document talks about our tribal consultation process that we began a couple years ago.

We have met with some tribes on government-to-government consultation, but not all of the ones that we hoped to meet with, and that will be an on going process. We will not issue any final permit decisions until our tribal consultation process is completed.

I don't have my slides today, so I won't be able to give you the information that I

presented in the previous hearing, but we will have another question-and-answer session tomorrow in Edgemont.

So if you could get down to the St. James

Parish Church at 1:00 tomorrow, we'd be happy to

continue with our question-and-answering

session, and I can talk about the monitoring

requirements that I can't cover now.

So with that, I also want to let you know that your comment is important today and your time is important, so we really appreciate you taking the time to be here. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Okay.

We'll get started. When I call your name, if

you can please come to either podium, and we'll

make sure we get the microphone to you.

Our first speaker is Dr. Peter Sotherland.

DR. PETER M. SOTHERLAND: I'm Dr. Peter Michael Sotherland. My primary concern with this project is the willful contamination of the pristine Minnelusa aquifer, which is the water source for me and most of my neighbors.

My secondary concern is the economic viability of fission, nuclear-powered electrical power generating's future, as has been

exemplified by the two General Electric power plants under construction back east that have been terminated, and the subsequent bankruptcy of the parent company, Toshiba, due, to cost overruns.

The unresolved nuclear waste problem and the legacy of Three Mile Island, Chernobyl,

Fukushima, and now the Hanford Reservation

failure.

The price of renewable energy is dropping precipitously, making it the energy of the future. The shortfalls of transmission and storage will be overcome by innovation and brute force efforts. The price of yellowcake is well below the breakeven point, and demand is decreasing.

Back to my primary concern, the injection of treated water into the Minnelusa aquifer.

Mr. Hollenbeck stated the solution injected as a waste stream into the aquifer would be a saltwater solution. Let's talk about this.

The Romans, after the conquest of Carthage in North Africa, spread salt, sodium chloride, into the fields of Carthage to kill the soil, thus starving the population into subjugation.

But the term "salt" is a chemically generic term, like the generic terms "dog," "flower," or "bug." There are many and varied examples within each category. The most commonly known salt is table salt, sodium chloride, which was illustrated previously.

In chemistry, a salt is the result of the chemical reaction of an acid and a base. Thus, salts are a combination of all sorts of elements that have the opportunity to react under the right conditions.

The process that is described by Powertech is the injection of water, oxygen, and carbon dioxide. This is really the injection of an oxidizing agent and an acid, carbonic acid Carbonic acid is made by adding carbon dioxide to water under pressure.

Think Coca-Cola. Pour Coke on the sidewalk, and it will fizz. With continued application, it will dissolve the concrete along with the other minerals present.

What Powertech is after is uranium oxide,
yellowcake. After the uranium oxide is removed
from the solution that is pumped from
underground, the remaining mineral salts that

are not money-makers need to be disposed of.

These are the salts that are to be disposed of in our drinking water. The chemical nature of these waste salts has not been defined, and considering the mineral complexity of the ore body, I suspect there are mineral salts that are not -- that are deleterious to life.

Mr. Hollenbeck stated that he would be willing to drink this waste saltwater that's to be injected into our aquifer, which reminds me of a classmate of mine in school who worked at the sewage treatment plant in the summer.

On a double-dog dare, he drank a glass of effluent from the plant and was immediately taken to the hospital to have his stomach pumped and given every injection they could think of. He did not die, but he did not receive any awards for intelligence. I am not willing to take a double-dog dare.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Sotherland.

Next if I can have Cathy Sotherland.

We're going to try to get the mic turned up, but if you can speak very closely and loudly into the mic so the court reporter can hear,

that would be great.

CATHY SOTHERLAND: Thank you. Thank you for coming. Thank you for taking the opportunity to give us the opportunity to share our concerns. We have many. And as my husband said, we have our well in the Minnelusa. We -- I sent you lists of all the wells in this area and all of the different aquifers they are in.

We're just uncomfortable with it. We have still got the remnants of the previous mines when uranium was booming back in the '50s through the '70s. They are not reclaimed yet, and they are still jeopardizing our water supply. The rivers, when we have floods, it's still not reclaimed.

His concern -- Pete's concerned about the uranium industry possibly becoming obsolete as renewables take on more and more positive ground. We don't need uranium. We don't need more uranium on the planet. It really should be left where it is. We have other resources that we should be exploring and putting into effect.

My experience when we lived in Edgemont back in the '80s was that our state is a poor state. They do not oversee projects like this. I, at

that time watched, the tailings pile blowing through our little town of Edgemont when we lived there, called the state, called the EPA, and was told that, yeah, our state has rather lax policies and environmental standards, and it was kind of a drag, but that's how it was.

Not willing to do that again. Our water is precious. You can not undo the violation that will happen if there is a mistake. And it is a matter of time.

As the EPA, you know, you have seen that there are accidents. You have seen that there are violations that are usually caught by the states and the people overseeing those. We will not have that oversight, and we have no one to watch our backs, and we have got everything to lose if we lose the water. I thank you for your time.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mrs. Sotherland.

John Sides.

JOHN SIDES: My name is John Sides. I'm the chairman of the board of directors for the Fall River Conservation District. As a conservation organization, we are strongly opposed to the

proposed uranium mining and injection wells at the site of Dewey-Burdock near Edgemont.

Conservation district boards are mandated to protect the land, air, and water quality.

Because of this, the Fall River Conservation

District board of directors wrote a resolution that went on to become the State of South Dakota's House Concurrent Resolution

Number 1025.

This resolution reaffirms the value of
South Dakota groundwater resources and
recognizes the need for ongoing evaluation of
our groundwater management. This resolution in
its entirety is attached to this statement.

This uranium injection well project could have devastating effects on the lives and the economies of all the people in Fall River

County. There are too many unanswered questions about this, about this project, such as possible earthquakes, contamination of the Minnelusa and Inyan Kara aquifers.

These two major aquifers supply water to at least 125 private wells, providing essential water to families and livestock. Chemical waste contamination would prove devastating to the

many people who rely on the Minnelusa and Inyan Kara aquifers.

In addition, the heavy truck traffic that is essential for a mining operation would be very damaging to the road systems of this county.

This cost -- this would cost the county and taxpayers extra dollars that it simply does not have for road repair and maintenance.

The population of this county cannot afford mistakes that could come with this project. The lack of clean, usable water could easily turn our towns into ghost towns, productive rangeland into wastelands. We need to protect our water source for the well-being of all livestock, wildlife, and human life. Thank you.

While I'm here, I'm also a private rancher, so I'll give my presentation on that. We own a cattle -- we own and operate a cattle ranch in eastern South Dakota. We are against the proposed mining injection wells in Dewey-Burdock area. The water from our ranch comes from the Madison aquifer by the way of pipeline. We cannot afford to take chances on polluting the water that sustains our livelihood. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you

1 very much, Mr. Sides. 2 Christa Spillane. 3 KARA HAGEN: My name is Kara Hagen. Christa Spillane and I are here on behalf of the City of 4 5 Hot Springs. We're both city council members. 6 I'm representative in Ward 1; Christa is Ward 4. 7 On May 17 out of eight council members 8 signed a resolution for the city of Hot Springs 9 to protect our water. And this is Christa 10 Spillane. She's going to read that resolution 11 to you. 12 CHRISTA SPILLANE: I have to have a light so 13 I can read. Sorry. I didn't bring my glasses. 14 Resolution from the -- as Kara said, this is 15 for the City of Hot Springs, Common Council. 16 Resolution 2017-10: A Resolution to Reaffirm a Citywide Commitment for Clean Water and Water 17 18 Resource Protection. 19 Be it resolved by the Common Council of the 20 City of Hot Springs, South Dakota, that we are 21 committed to preserving and maintaining the 22 amount and quality of the water for the citizens 23 of Hot Springs and its surrounding environs, 24 and;

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Whereas, the City of Hot Springs was first

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developed as a town in the late 1800s due to its proximity to Fall River and the abundant natural warm mineral springs within the valley, and;

Whereas, the City of Hot Springs has made a long-term investment in storm water management, potable water systems, and wastewater management programs and infrastructure to reduce nutrients and pollutants in our waters and to protect our vital water resources, and;

Whereas, the Common Council is obligated to preserve and protect the public health, safety, and welfare by preventing the pollution of, and maintaining the quality of the water entering in, held within, and removed from aquifers serving as the City's water source, and;

Whereas, the City of Hot Springs has stated in its water ordinance that our mission is to provide the City's water customers with a safe drinking water supply, supply water for fire protection, and an adequate supply of water for our essential daily needs, and;

Whereas, the City of Hot Springs Common

Council finds that any pollution or

contamination, willful or not, of our water

supply to be a direct threat to our community

and its health, safety, and welfare, and;

Therefore, be it resolved that the City of

Hot Springs will take necessary action to ensure
the perpetual purity and quality of the waters

available for use of the citizens of Hot Springs
and the City's -- and those the City distributes

water to, and;

Therefore, commit to support any action from the county, state, and federal governments aimed to protecting the waters of South Dakota, both surface water and underground aquifers, as a critical natural resource necessary for life.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Spillane.

Paul Wheeler.

PAUL WHEELER: My name is Paul Wheeler.

I've been a rock hound of sorts, a minor geology

buff for many years. I've traveled into the

Black Hills for over 30 years and recently

purchased a house here in Hot Springs.

After reading the Class III and Class V
permit fact sheets provided by the EPA in
regards to the proposed project, it is evident
to me that this project is, at the very least,
impractical and, at the very worst, extremely

dangerous.

Considering the complex subsurface geology of the area and its close proximity to known fault joints, the choice to use injection well technology to both contain contaminated wastewaters and mine subsurface uranium deposits is both irresponsible and potentially catastrophic.

I would like to comment on just as few of the potential points. Page 23 of the Class V sheet states the locations and conditions of fault zones in relation to the project area.

And I quote: The Dewey structural zone consists of steeply dipping to vertical faults that are uplifted on the north side relative to the south side of the zone, a total of 500 feet.

The Long Mountain structural zone is located approximately 7 miles south of the project area. This fault zone consists of small northeast-trending normal faults observed in outcrops of the Inyan Kara group and Sundance formation within a zone measuring several miles across.

The displacement across the faults measures up to 40 feet, with folding of the strata

adjacent to the faults adding up to 60 feet of additional structural relief.

The faults in the Dewey project will occur northwest of the Dewey fault in the Dewey terrace area approximately one and a half miles northwest of the project area. A subsurface fault was identified by seismic methods about five and a half miles north of the project area. It is about one and a half miles long and 400 feet wide.

Three faults are shown in the northeast corner of the Burdock Geological Quadrangle. The reports states that these faults have a displacement of less than 10 feet and are located two and a half miles or more from the eastern edge of the project zone.

So -- end of quote. In short, there are at least a half dozen faults of differing size located within a mile and a half to five and a half miles from the project zone.

On page 25 of the Class III draft sheet,
this -- there's an even better picture drawn of
the Dewey fault, and I quote: The Dewey fault,
a northeast to southwest trending fault zone,
lies approximately 1,500 feet northwest of the

Dewey-Burdock permit boundary.

So again, we have a steeply dipping fault line lying less than a half mile away from the project zone.

Related to those facts, page 26 of the same sheet states, and I quote: Many other faults are probably present, but not discernable because of poor exposures.

Let me repeat that: Many other faults are probably present but not discernable because of poor exposures.

In response, it is stated, quote: If there are any faults and fractures occurring within a well field area that cause a breach in a confining zone, they will be detected during the well field drill and pumping testing.

If found, the placement of injection and production wells can be modified from the regular pattern to control flow around the fractures or faults to keep it flowing through the uranium ore bodies rather than along these paths of lower hydraulic resistance, end of quote.

So if additional fractures and faults are found in the projected area and there are

already many, Powertech will simply and safely adjust the flow around these breach zones and continue to mine uranium? To think that you can safely continue to apply injection well technologies in an area of potentially breaching fractures and faults, I find to be both ridiculous and irresponsible.

If the information showing the close proximity of numerous fault zones to this injection well area is not enough to disallow this project, you must also consider the confining layers that will be used to contain the injected fluid.

The entire project area relies upon a lower and upper containment layer of Fuson shale that underlies the whole region. But to quote from page 22 of the Class III sheet: There may be points where the Fuson confinement zone has been compromised by improperly plugged exploration drill holes or wells that penetrate the Fuson confining zone. Evidence suggests at least one breach in the Fuson confining zone is included in the reports on the pump test.

It is clear from pages 15 and 17 of the Class V sheet that the porous nature of the

Minnelusa sandstone as an upper containing layer is a concern.

REGIONAL JUDICIAL OFFICER SUTIN:

Mr. Wheeler, your time is up, so I'll need you
to wrap up, please.

PAUL WHEELER: Oh, okay. Well -- so, in its own outlines, the United States -- two paragraphs. The United States Geological Survey lists specific factors necessary for injection wells to induce earthquakes. Those factors include the presence of faults that are large enough to produce earthquakes, stresses that are large enough to produce earthquakes, and the presence of pathways for the fluid pressure to travel.

It is obvious that those same factors are in severe question in relation to this project. I think what I would like to say is that geology is an imperfect science. I'm sure the Powertech geologists would agree. What cannot be seen below ground cannot be anticipated or contained.

In my opinion, considering the toxic nature of these injection fluids, and the obvious dangers of both questionable confining layers and their close proximity to known and unknown

1 fault and fracture lines, the idea that this 2 project can be done safely and with no ill 3 effects to our water supply or to local geologic integrity is foolhardy and defenseless. 4 The massive public and environmental loss 5 6 that could very well occur far outweighs the 7 singular and unnecessary private gain that is 8 being sought. 9 Thank you. 10 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 11 Mr. Wheeler. 12 Next if we can have Gardner Gray. 13 GARDNER GRAY: My name is Gardner Gray. 14 There are many reasons why the EPA should deny 15 Azarga any permit to mine uranium and/or inject 16 toxic fluids into currently used aquifers in the 17 Dewey-Burdock area of South Dakota, including 18 the Inyan Kara, the Minnelusa, Deadwood, and the 19 Madison. 20 There is no market for yellowcake. There's 21 no profit to be made by mining uranium. 22 Therefore, there's no reason for Powertech to 23 drill deep injection wells for toxic fluid that

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It would appear that the only way for

they will not be creating.

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Powertech/Azarga to profit by their permits is to make deep injection wells available to outside sources of toxic waste. Powertech denies the idea of outside sources of waste saying they do not plan -- that's in quote -- they don't plan to take in outside toxic waste, despite the fact that their permit allows it and profit demands it.

And remember, Powertech cannot -- Powertech cannot do any mining at all unless the laws protecting the water and the land are put aside and waivers issued allowing the contamination, which is by law not allowed.

These new permits will allow Powertech to pollute the Inyan Kara and the Minnelusa aquifers directly, and the Deadwood and the Madison aquifers by transmissivity. Once these aquifers are contaminated, there will be no remedy.

They say they only need one and a half percent bleed, which is somewhere around 300 gallons a minute. So why ask for a 1000 gallons a minute? If they will not take in outside waste, why allow for it?

They say the waste to be injected into the

aquifers is just saltwater when the laws of chemistry refute that claim. The application to the NRC by Powertech shows that the waste will be impregnated with radium, cadmium, chromium, and arsenic, among many others poisons. These chemicals will absolutely be part of the so-called lixiviant.

New boreholes for toxic waste disposal are being requested because the original plan to mine uranium in-situ is now irrelevant due to the low value of the material and the lack of demand worldwide. Also, alternative energy sources, such as wind and solar, are now employing more new workers than the oil and gas industries combined.

Professional geologists and chemists from

South Dakota School of Mines, Chadron State, and
private practice have testified most effectively
as to the dangers of this plan for all the
residents in the area through the irreparable
damage done to the water supply.

The misuse or contamination of the aquifers in the Black Hills flies in the face of good judgment due to the increasing importance of usable water, not just in drought-affected

South Dakota, but the nation as well.

We are depleting our water supplies by allowing the very kinds of destruction envisioned by Azarga and the EPA. With the demand for water ever increasing due to continued world population increases, it's imperative that the protection and careful usage of our water supplies be our guiding light. To actually embrace the opposite behavior is to violate the EPA stated purpose -- where am I?

It is no longer possible to deny the threats to our remaining water supplies driven by in-situ mining and ruination. It is the EPA's responsibility to make sure the water and environment remain safe.

The Black Hills Hydrology Study of 1990 and subsequent, available from the USGS, is a fine and revealing scientific paper available for your review about this transmissivity and the dangers involved. It's about a 400-page report, and you don't have to get to even page 50 before it's obvious that this is a bad deal.

The fact the Platinum Partners, which is
Azarga's largest shareholder, is being charged
with a variety of misdeeds which, if convicted,

could provide prison terms for the guilty, should be a wake-up call to the EPA as to the kind of ethics embraced by Azarga.

With the company based in China, overseeing a Canadian company with offices in Colorado, one can easily guess how Azarga feels about the long-term health of the citizens in this area when compared to the drive for profit at all costs.

How am I to explain to my granddaughter that her government decided that it was safe and reasonable to exchange her healthy drinking water for a few pieces of silver in the pockets of a few profiteers? Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
Mr. Gardner.

Mary Helen Pederson.

MARY HELEN PEDERSON: My name is Mary Helen Pederson. I live here in Hot Springs.

When I was in the ninth grade, which we called freshman at that time, I went to school in Edgemont, South Dakota. I was there for only one semester, but even at that age, I could tell that there was something wrong in the atmosphere. So I paid attention to the uranium

from then on and learned everything I could about them.

We need to protect our water, our economy, health, and way of life. Let's stop this bad idea right here. This is a very dry area of the country, even of western South Dakota. We can't lose 8,000 gallons of water per minute for the next ten years.

It would not only affect the Inyan Kara aquifer, but the Minnelusa and the Madison aquifers. These are all used in this area. We can't afford to lose that much water or have them polluted in any -- in any of these aquifers. These aquifers are known to communicate.

If there are permits -- if these permits are given to Powertech/Azarga, then there is ten more companies that will fly -- will file for the same permits all around the Black Hills, also the companies that are encroaching from the plains for deep hole disposable wells. Are we trying to make South Dakota the next uranium dumping area?

This kind of stuff would also disturb cultural and historic sites, wildlife, and our

ranching and tourism economy. Handling uranium in any form produces radioactive and toxic waste that threaten people's health and our food chains.

Hannan LaGarry is a geologic -- geologist -I can't even talk -- that had worked this area
and knows that this whole area has many faults.
That's what happened to Chadron Creek in 2007.
It just disappeared one day into a fault in the
earth. And that was their total water supply
for the town of Chadron, Nebraska.

He and some helpers went over 10,000 pages of the permit. He looked at the drillers' notes and found artesian wells popping out some of the holes, which shows faults in the aquifers. And all the holes dug over there have not been plugged like the NRC told them to.

Some of the holes went into the caves. Like Wind Cave? Lots of things he found in the drillers' notes were things like, Don't tell the landowners and don't report the Indian relics. This was just all about the 760 well holes that aren't plugged from the TVA.

Hannan LaGarry also mapped the aquifers. They are flowing from the west to the east.

That joint -- the most jobs that would be at the startup is 80 versus 350,000 people losing their good water.

In the government -- is the government going to send in contaminated bottled water for us?

Go to the Uranium Cowboy on YouTube to see a lot of information on this subject. Crawford,

Nebraska is the only area that now has a high rate of pancreatic cancer in Nebraska and United States.

Dennis Yellow Thunder has filed a petition for review of the Crow Butte's permits.

According to Linsey McLean, a known biochemist and NRC expert witness, there have been one and a half million chemicals introduced into the body since World War II.

Also, the Tennessee Valley Authority, after ten years of looking for uranium to mine in the Dewey-Burdock area, left because they found too much gypsum and cave lines in the area.

It has already been proved that injecting materials into high -- under high pressures deep underground causes earthquakes. This area is already having numerous earthquakes as the whole Black Hills is in uplift stage. More and harder

earthquakes are apt to break those deadly gasses stored over there under Igloo. It could kill every living thing in the area.

These permits would allow the company to pollute our underground water, which we all rely on. Just across the western border in Wyoming, Cameco Resources has been hit with nine apparent violations on how they are shipping uranium products.

REGIONAL JUDICIAL OFFICER SUTIN:

Ms. Pederson, your time is up, so I need you to wrap up, please.

MARY HELEN PEDERSON: Okay

New information in yesterday, all those wells north of Hot Springs are in the Minnelusa aquifer. According to Ken Buhler of the South Dakota Department of Environmental and Natural Resources, or the DENR, said that there are hundreds to thousands of domestic wells using water from the Minnelusa aquifer. 196 appropriated water rights permits in the Minnelusa, which include municipal, commercial, and industrial use.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Pederson.

Robert Lafferty.

ROBERT LAFFERTY: My name is Robert

Lafferty. I'm from Pine Ridge, South Dakota,

and I just have a couple concerns on who

actually owns Powertech. Is it Azarga, or is it

a Chinese investment fund from China? And so

they will be making the money, and after about

10, 20 years, they'll be gone, and the

contaminated water will still be here.

And my other concern is about the sulfate, radium, and iron that's going to be injected --supposedly supposed to be clean water being injected into these wells. And Powertech is getting free water and not paying for it? I don't agree with that. That's it.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Lafferty.

Ed Harvey.

REGIONAL JUDICIAL OFFICER SUTIN: Go ahead.

ED HARVEY: Good afternoon. My name is Ed Harvey. I'm a resident of Hot Springs.

All the aquifers in this proposal are presently being used for potable water by local residents, thus no exemption to the Safe Drinking Water Act of 1974 should be allowed.

Both domestic and agriculture wells are in use.

The NRC has prohibited the in-situ mining operation in this area until the 7600-plus abandoned boreholes are properly sealed.

Geologically this is part of the Black Hills uplift area, which is still rising, causing the rock to be highly fractured and constantly changing.

Both of these conditions allow flow between all area aquifers. This will make containment of mining waste and waste fluids impractical or improbable. Aquifer flow data is presented -- as presented is inconsistent.

In the mining application, the flow rate of feet per year is cited; yet in the very next paragraph, a pump test showed a drop in a test well 1500 feet away in less than five minutes. Pressurized injection would certainly move faster than pump suction head values.

USGS aquifer data shows tritium levels, which would infer high flow rates from the known recharge sources. This was assumed to be caused by an unknown recharged source.

TVA driller notes, initially suppressed by Powertech, show that at least one borehole went

into an underground cave. This could be due to the Jewel Cave and/or Wind Cave structures extending under this area.

USGS aquifer data also concludes that flow rates through such structures is similar to surface flows in the area. This could easily explain the deviation between well data and tritium data without the need to identify an inferred new recharge zone.

I am concerned that this project has a high probability for rendering my water unusable forever in the next few years. I do not understand how radioactive waste is acceptable for injection into an actively used aquifer which sits above another aquifer which is also actively used.

Present ion exchange technology will not remove organified heavy metals, including uranium. Disposal of this waste fluid should require permitting for a Class I well, not a Class V well, and continuous independent monitoring of the waste should be required.

Since no mining operations are occurring, no need is shown for disposal wells at this time.

This area is also seismically active, with known

faults in close proximity. Given the known occurrences of induced seismicity from injection well operations, containment of hazardous materials cannot be guaranteed.

Will the agency granting these exceptions be responsible for mitigating any damages caused by this permit? Will a bond be required sufficient to provide water to all affected residents and to cover any damages, like those seen in Oklahoma? Who will be responsible for the cost of testing present domestic wells, to obtain a true water quality baseline?

I understand the concept of putting a few rural residents at risk for the perceived benefit of a larger population base. However, you must accept that agricultural products grown on soil that you allowed to be contaminated, with water you allowed to be polluted, will end up in your grocery market shelves. It's called karma.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Harvey.

Patricia Shiery. Sorry. If I'm not saying that right.

PATRICIA SHIERY: You are.

Good afternoon. My name is Patricia Shiery.

I am currently a resident of Hot Springs,

South Dakota. I originally come from East

River, Madison which I served 2011-2012 in the

state legislature. At that time I did fight

against this project, and I continue to fight.

I continue to study and to research and to learn more about uranium, about the ISL process. And what I have discovered is there's a purpose for uranium in the earth, and that purpose is it has a huge effect in the magnetic flow of the earth. It also has a huge effect in keeping the earth warm.

If we keep removing the uranium from the earth, it's going to affect the polar -- it's going to -- how our earth axis sits, and it's going to affect our weather patterns.

I want to now speak on a comment that

Mr. Hollenbeck did -- had made: Uranium mining
has already been proven safe in other areas.

I'm not exactly sure what other areas

Mr. Hollenbeck has been referring to, but in my
research, it has not at all been proven safe.

In fact, uranium mining and processing is both
water- and energy-intensive. By-products are

considered hazardous and highly radioactive.

Although uranium is natural if left in the ground, when mined, it no longer remains in its natural state. As toxic radioactive material is mobilized, once removed from the ground, humans and wildlife face a greater likelihood of exposure to uranium and its by-products by inhaling contaminated dust in the air or by ingesting contaminated water and food.

The product from uranium mining is a powder that, when stored in drums, emits radiation as the uranium breaks down. Waste products left behind remain hazardous and radioactive for 100,000 years. Substances and tailings include thorium-234, radium, radon, lead, bismuth, polonium.

For every ton of radioactivity that is stored in tailings, there are additional tons of toxic chemicals. These toxic chemicals are dangerous to the human health and increase the risk of cancer and genetic defects. This has been proven by the National Academy of Science of the United States.

They further state that it has not been proven that uranium mining is safe and that the

unknown risks are just too great to compensate for unknown anticipated rewards. Banning uranium and mining and milling should be enforced.

Now I want to speak about some studies done by a hydrogeologist, Dr. Roseanna Neupauer from the University of Colorado. She studied groundwater flow at an ISL mine in Christensen Ranch, Wyoming. And she found that contaminated -- contaminants, excuse me, will remain in the aquifer after all effects of restoration and will migrate through the aquifer into the future.

She noted that a comprehensive modeling exercise was impossible because of insufficient data of the spatial distribution of various chemical perimeters or on the chemistry of the injection solution used by the industry.

Dr. Neupauer noted that diffusion of chemicals out of the immobile region can occur over many years or decades. Thus, even if the water in the mobile zone appears clean, it may become contaminated over time by this diffusive process. It would further increase the concentration of lixiviant in the past -- in the

post-restoration aguifer.

Dr. Neupauer reported that her report is consistent with that of experts of USGS and other geological scientific communities.

Groundwater has never been restored at ISL operations -- the NRC acknowledges that -- and some 40 percent of measured constituents could not be restored to the baseline conditions.

Now I'm going to speak on the term

"baseline." It is actually a misnomer in that

it does not refer to the real pre-mining

baseline condition of the groundwater or the

entirety of the aquifer.

Instead, a selected baseline from the immediate baseline production area of the ore-bearing portion of the aquifer is established. Thus, aquifers and groundwater are left unstable.

ISL uranium mining is a poor choice to contaminate scarce western groundwater and harm the environment. Truthfully, only a small number of short-term jobs will be provided with this project with an inherent environmental risk. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Marlene Akhtar.

MARLENE AKHTAR: My name is Marlene Akhtar, and I'm also speaking for my husband, Dr. Hassan Akhtar. We put in a well about 15 years ago, and it was 640 feet down, but he said it was in the Minnelusa foundation. And the State came and tested it within a few weeks, came to our door, and said, "You have the best water in the county." This is our water. There's no salt in it. I don't want salt in my water.

Also -- and thank you for coming, by the way. We are a little blue marble in space.

This is a little blue marble in space. All the water in the universe is within this blue water.

All the good air is within this beautiful little blue marble.

If we contaminate it, it's gone. There's no more water coming. It is our responsibility to protect it, and it is your responsibility to protect it, too. Our water must be protected at all costs.

Those who are for the mining of uranium are for the money. Those against it are for our protection of water for now and future generations. I look out here, I don't see

anybody fabulously wealthy, so we're not here because we're going to get money to protect this water. The ones that are going to receive the benefits probably do not even live in South Dakota, and we just can't let this happen. It's our responsibility.

Having just come on board, I've only been working on this for a week. I don't know a lot of the information, so I thank a lot of you that have done all the environmental -- I mean, I'm learning a lot.

When this is done, for one thing, I'm testing our water. It's costing us \$750 to prove that the Minnelusa water is pure. I will see that you get a copy. Also, I'm trying to get ahold of the state report that said we had the best water in the county. I will see that you get a report.

Because I just started, there's a lot of things I don't know, and I'm going to talk to a lot of people. I'm going to contact medical professionals, see if I can get doctors and nurses on board. They're the ones that are going to have to take care of us if we get sick. They need to know what they're dealing with if

this should pass.

When I have completed all my information, I will see that you get a copy. I will send a copy to President Trump, to Vice President Pence, to the Department of Environmental, to Rick Perry, to all of our senators, to the congressmen, to anyone I can think of. That will be sent by e-mail and snail mail.

And let them all decide if they're going to turn their heads and let this happen to us, because it's our responsibility and they're responsible for taking care of us.

And that's all I know because, like I said, I'm just getting started. So thank you for those that have all the information in your heart, and you shared it. Thank you for coming and giving us a chance, and you'll be hearing from me. Okay. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you very much.

Susan Henderson.

SUSAN HENDERSON: Good afternoon. My name is Susan Henderson. I am a cattle rancher. I was born on the property that we now own south of Edgemont. We have owned and operated that as

a family since 1902. We know a great deal about this area, and we know a great deal about water.

It is my considered opinion, after having looked at this for a long time, that we cannot afford this project. This project will destroy the water in this area. When we do that, the cattle ranches will not be able to survive. 98 percent of us now use underground sources of water to augment our water supplies. Without steady water, we cannot run these ranches, period.

This area also has the Angostura Dam, which is the largest freshwater irrigation and recreation dam in western South Dakota. This dam is under siege. Because we have the Dewey-Burdock area, which now has over 200 open pit mines left from the 1950s and 1960s, this area is draining into Pass Creek and Beaver Creek and ultimately into the Cheyenne River, where it ultimately ends up in Angostura Dam, which then drains into the Missouri River.

This is a critical water source, and it's a critical water source as identified by the Environmental Protection Agency.

This area has 7,650 boreholes that were

drilled there by the Tennessee Valley Authority during a time after uranium mining was suspended by the four companies that had gone broke and abandoned the open pit mines in the Dewey-Burdock area.

Four of those mines are at least a mile across, and they had at least 90 feet of extremely contaminated radioactive arsenic-laden water. It kills every wildlife that approaches it.

Now, the proposal before us is to have another 4,000 wells drilled. And these can ultimately be sold, the permit can be sold, and we can use this for dumping oil and gas fracking waste and radioactive sludge from the operations of a uranium mining operation that may or may not take place here, or ones that are already taking place in other places.

This is a disaster waiting to happen. What will happen here is that the already fissure-laden structure underneath this area will begin to move water toward the aquifers. I submit to you that many, many, many wells exist in Fall River and Custer Counties. I am aware of at least 2500 that are registered with the

State of South Dakota.

I myself have an Inyan Kara well of extremely good quality on my cattle ranch just south of this project. Without that well, my ranch would be basically worthless.

We have an opportunity to put a stop to this. We need to put a stop to this. We need to do whatever it is going to take to put a stop to this because our livelihood depends on this. We will not get another chance.

Once these aquifers are polluted, there is no going back. There is no fixing. There is no taking the arsenic out. There is no taking the radiation out in sufficient quantities to make it okay to use.

In the area of the Dewey-Burdock, the Madison, the Minnelusa, and the Inyan Kara aquifers are in close proximity. They are also broken up by the 4,000 -- I mean the 7,650 boreholes that are already there, the Wind Cave structure that's underneath it, the various things that were done during the mining activities.

In other words, it's Swiss cheese. And what we are going to do is move radioactive waste

into this Swiss cheese and then contaminate our water.

We can't get this back. And we can't afford the finances that will happen to us. Let's look at what would happen. It will destroy ranching and farming in this county, which is most of the action. 60 percent of the taxes paid in Fall River County come from those operations.

You will make a mess out of tourism because you will lose water in key areas and word will get around that people don't need to come here anymore.

REGIONAL JUDICIAL OFFICER SUTIN:

Ms. Henderson, your time is up, so I need you to wrap up, please.

SUSAN HENDERSON: Now, I would say to you that we can find Washington. I can find Washington. By this presentation, I wish to preserve my right to object to these -- to whatever decision you make that allows this project. So be on notice that this is something that we should all band together to stop. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you very much, Ms. Henderson.

Next if we can have Uriah Luallin.

URIAH LUALLIN: Good afternoon. Sure appreciate what everybody has said at this point. I'll keep mine short.

In regards to the in-situ uranium mining in the Dewey-Burdock area of Fall River County and Custer County, South Dakota, I have grave concerns for giving an aquifer exemption for the Minnelusa to deposit waste in Class V deep injection wells or Class III wells and the in-situ mining of uranium.

My well is in the Minnelusa aquifer, and waste with any radioactive or other chemical allowed in the drinking water on purpose or by accident would possibly contaminate my well.

While we know a lot about what happens underground, we certainly do not know the extent and variables in the geological forms below the surface to guarantee how water moves or will move.

Compounding this is the presence of numerous exploratory wells that have been drilled in the past. These wells have not been filled, cased, or capped.

The Class V wells, according to the EPA

site, are for waste that has been cleaned and will not contaminate the U.S. drinking water. The problem is monitoring this procedure. The mining industry cannot be trusted to self-monitor, and the EPA has not done a good job in the past. Mistakes and violations once made cannot be remedied.

It has been discovered that pumping high-pressure fluids into faults and cracks in the rock can and do cause increased earthquake activity and strain. The area in question is of this nature and has connections with immense cave networks, such as Jewel and Wind Cave.

This area has already suffered at the hands of the uranium mining industry. These foreign corporations basically exploited the area and left the cleanup to the taxpayers. The medical and physical harm is still evident today.

I'm asking this application for uranium mining and high-pressure deep injection waste wells be denied.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Rajni Lerman.

RAJNI LERMAN: My legal name is Caryn

25 Lerman.

I'm here to strongly urge you to deny both the UIC Class III area permit for injection wells for the ISR of uranium and the UIC Class V area permit for deep injection wells that will be used to dispose of ISR process waste fluids in the Minnelusa formation.

My husband and I have recently purchased property here in Hot Springs and relocated here for the natural beauty, peace, and clean air and water afforded to this less-populated part of the country. This is intended to be our place of retirement.

I am deeply concerned about the prospect of our final residence being degraded and devalued by the potential contamination of our water supply. Our property located at 2244 Minnekahta Avenue has a well in the Minnelusa aguifer.

The water is pure and clean, and currently we use it extensively to grow organic vegetables, feed our animals, as well as many other uses that we need outdoors.

Since our property is 2 acres, it is large enough to subdivide in the future if we so choose. Any additional structures we may build on our property could actually tap into our well

for potential household use. That is, of course, unless you approve of these permits.

The proposed permit in particular for deep injection wells that would be used to dispose of the ISR process waste fluids into the Minnelusa formation is a real threat to my family, home, and community for numerous reasons, including, one, the mining industry's recurrent inability to properly manage these materials safely; number two, the Black Hills's geology is not static, and the sheer movement of the earth allows for the material to flow into our aquifers; number three, uranium is known to cause harm to human health; and number four, the potential of increased seismic activity could result in our town losing its greatest resource, our water.

In my letter here that I'll be submitting today, I have researched and noted specific scientific articles showing evidence to support each of the reasons I just listed, and that is why I'm asking you to deny these permits.

As a yoga instructor, a health and wellness advocate, and the director of the new Hot Springs Farmers Market, I spend a

considerable amount of my time and money to educate myself and others how to live a long and healthy life.

Pumping our aquifer with the fluids containing uranium puts me, my family, and our community at substantial health risks. Is the EPA going to pay for our long-term health care bills due to uranium exposure? Are you going to provide me, my family, and our community with clean drinking water for the rest of our lives?

Is the EPA going to reimburse our city for possible losses to our main economic resource if Fall River was to dry up as a result of the proposed mining activities? I doubt it.

But it is your main responsibility to protect the public's access to clean water, per the Safe Drinking Water Act. No exemptions of this law should be made nor any permit be issued to mine uranium or dump toxic chemicals into our critical aquifers which are necessary to sustain life. Please use your conscience and your legal obligation to the American public and deny these permits.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Lerman.

John Davis.

JOHN DAVIS: Thank you for being here today and giving me an opportunity to speak. My name is John Davis. I hold a degree in -- a bachelor's of science degree from Black Hills State University, and I've used that to understand heavy metal poisoning.

Your reported claims that there's no potable water in the Minnelusa aquifer is untrue. What our well-driller told us about 20 years ago here on the outskirts of Hot Springs was our water from Minnelusa aquifer was the best in the county. Of course, you heard that from my mom. She was here.

You know, I don't -- hearing everyone's testimony today, I can't see why this would even be a question as to whether or not to do it or not, to dump this water in there, because it's toxic and you're going into an aquifer.

Usually you go underneath it, right, from what I'm understanding. It just doesn't make sense. I mean, there's something else here.

There's no uranium there to be mined that's profitable. So what are you not telling us?

I read some reports from Linsey McLean.

She's an environmental microbiologist, biochemist, well-known, and she reports on the effects of heavy metal -- heavy metal poisoning and the ill effects that it produces.

This water is essential to all living organisms. We are in a symbiotic relationship with everything on this planet. And someone mentioned the law of karma. That's the law of cause and effect. What you sow, so shall you reap.

And other people have said you're not even in this town, so the people who are going to be making the money, they'll make the money and leave. So where does that leave us? And someone said we have to clean up the mess.

You can't -- you can't really say what the underground topography is. You don't know. We don't know. There's no instruments to tell you. So why not bet on the sure thing, don't deposit the nuclear waste and the heavy metals, and leave it alone and let nature take care of it.

You know, this concerns me because we were going to sell our place several times, but I said, No, we've got -- this is the greatest water here. And it supports life. If you

damage it, you can't take that back.

4500000000.00 years is the half-life of uranium.

That's a long time. And the law of karma is exacting.

So I guess I would just leave you with a question. I know you're not answering questions, but when you joined the EPA or -- what gave you the right to make decisions that affect our lives? What gives you that right? And you just think about that, because I love this place.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Mr. Davis.

April Smith.

APRIL SMITH: That came up so fast. I want to thank Mr. Davis because I have this, like, concise thing I was going to say and not be emotional, and I really appreciate that he went there. So thank you.

I think that companies like Powertech come into places like South Dakota because the population is so small and people here, they work hard every day and they just try to get by. And they don't have time to come to things like this, and they can't educate themselves about

1 what's really happening to the land and the 2 water. 3 And so I would encourage everyone here to try and express what's happening and hopefully 4 5 get more and more people on board to expressing 6 to the EPA during these types of open comment 7 periods to oppose the permits and the aquifer 8 exemption. 9 And big companies like Powertech come in, 10 they do what they want to do, they say what they 11 want to say to get the -- whatever they want to 12 do -- go in, they pollute our beautiful land and 13 water, and then they leave. I worked on a 14 Superfund site, and I didn't know it. And it was in the District 9. 15 16 Is that your district? REGIONAL JUDICIAL OFFICER SUTIN: 17 18 APRIL SMITH: 8. Okay. But through Denver; 19 is that correct? Salt Lake, is that --20 REGIONAL JUDICIAL OFFICER SUTIN: We're in 21 Denver. 22 APRIL SMITH: But you cover Salt Lake? 23

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REGIONAL JUDICIAL OFFICER SUTIN: Yep.

lot of educated people that I worked with, and

APRIL SMITH: And so, you know, there was a

they didn't know that they worked on a Superfund site. So, you know, the idea that, you know, having open, you know, conversations and, you know, people educating each other happens. It takes a lot of work, even when -- it just blows my mind.

So please, please don't allow these permits because it makes people sick. It's our water. We can't get it back. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Smith.

Sarah Peterson.

SARAH PETERSON: My name is Sarah Peterson.

I moved to Hot Springs in 2002 because of the abundant clean, pure spring water here. I moved from Colorado after spending my childhood in Breckenridge, Colorado, and I moved -- Breckenridge, Colorado. I moved to Golden, Colorado, and then to Boulder.

In the 1970s I became involved with the Rocky Flats Truth Force, a group of people who wanted the truth about the Rocky Flats nuclear weapons plant to be exposed. I watched friends who got high-paying jobs at Rocky Flats right out of school, they turned yellow, then they

turned green, then they turned gray, and then they died.

The whole time, the information coming out of Rocky Flats was the levels of radioactivity were safe and below normal ranges.

In 1983, I took my 18-month-old daughter to a protest on the grounds above the plant. A few years later when the plant was closed due to radioactive contamination, the EPA came to clean up the underground plant and the plans on the ground above was for an open space.

The EPA found the levels of radioactivity were so high, the ground was not even safe for day use, and it stands empty and fenced off to this day.

I drove from Golden to Boulder when I was attending CU. I went right by Rocky Flats. I always thought as I was passing I would just hold my breath. While attending CU, I was an art major with a focus on pottery.

In the glaze room, where I formulated glazes from mineral powders, there was a large jar with a skull and crossbones on it and a sign, vanadium oxide.

It was a beautiful yellow, and I

experimented with it. Today I know that vanadium is radioactive, and I carry that in my body. I am in the 97.5 percentile for vanadium.

In the 1970s, one of my many geology classes I took -- I took in college, we went on a field trip. I was in paleontology. We took a field trip to the old limestone quarry right across the highway from Rocky Flats.

We were digging in the radioactive limestone for marine fossils. People believed that this was safe. I carry uranium in my body today. I am in the 95th percentile for uranium.

In the 1960s and '70s, the public was not educated about radioactivity and believe the propaganda the mining, power, and weapons industry fed us. Today it is different, and we know the dangers of radioactivity.

It's ironic that the picket signs I used to -- the picket signs for Rocky Flats nuclear power plant I used to paint were, "Don't kill me before the enemy." None of those nuclear bombs made at Rocky Flats have ever been used against any enemy.

The radioactivity released -- the radioactivity released making all those bombs

still contaminates the earth and many who live there.

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I have been an organizer for a group of citizens in the Southern Hills working to educate the people of Fall River and Custer County about radioactivity, uranium, and the in-situ leach mining.

I am handing in documentary and hydrology testimony from the NRC hearing, and I'm also submitting you my tests, my hair tests, that show all the heavy metals and radioactive element levels.

I ask you, please protect us. Protect me and all the people here. I don't want any more uranium or radioactivity or heavy metals in my body. I have enough. And I don't want to have to move. This is my home. And I moved here because of the spring water. It's beautiful, beautiful water.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Peterson.

We're going to take a ten-minute break, so we will start up again at about 3:37 -- 3:47. Sorry.

(A recess was taken from

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1 3:27 p.m. to 3:47 p.m.) 2 REGIONAL JUDICIAL OFFICER SUTIN: Okay. 3 We're going to get started again. A couple things that we're going to -- one thing we're 4 5 going to change. 6 It's very difficult for the court reporter 7 to hear and see what you're saying from the 8 podium down below, so we need to ask everyone to 9 come up to this podium to speak. 10 And if you are speaking from a written 11 document, please try and read it slowly and 12 clearly so that we can hear and understand. 13 Okay. We'll get back to taking testimony. 14 Our next speaker is Deborah Tobacco. 15 DEBORAH TOBACCO: (Speaking in indigenous 16 language.) 17 My name is Deborah Tobacco, and I live in 18 Pine Ridge. I'm a member of the Oglala Lakota 19 Nation. And my main purpose in being here today 20 is to, like all of you, have a say in the 21 preservation and protection of our clean 22 drinking water. And for me as an Oglala Lakota, 23 it's simple. When there's a lack of clean 24 drinking water, there's no peace or justice. 25 Short-term profits for the sake of

short-term gratification is asinine. It's ecocide and genocide. People will have to move out of that area due to no drinking water. It will cause diaspora. Diaspora to the indigenous is genocide.

It's good to see all the people here that share the same ideals as clean drinking water as I do. I really appreciate that. For a long time as a Native person, an Oglala Lakota, we talk about and actually have to fight for clean drinking water, and I don't think that's the way it should be.

I think if we all stop and take a look at the impact it will have on our families, our future generations, the impact is great. And I think we need to look at it from the perspective that we are all in connection with one another, and we are all indigenous to this planet, and it's all of our responsibility to ensure that not only our lifespan, but the lifespan of our children, our great-grandchildren are always looked after and always put first and foremost.

Thank you.

(Speaking in indigenous language.)

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Martin Bates. We need you to come up.
Thanks.

MARTIN BATES: Hello. My name is Martin

Bates. I'm a veteran of 20 years in the United

States Air Force. I'm not a resident of this

area. I'm just learning about this area. My

wife and I are residents of Madison,

South Dakota, but we are really residents of a

motor home, and we travel around. We

appreciated the South Dakota welcome several

years ago as residents, and we can do that.

I'm also -- I had 20 years in the Air Force.

And when I got out of the Air Force, I joined an organization called Veterans for Peace, and we stand up for equal rights, human rights, smart decisions. And having spent my whole life trying to walk lightly on Earth, I've noticed that there's a lot of people that don't walk lightly on Earth.

And I don't know, it seems like they do it because they disregard other humans and they disregard water, air, trees, animals, et cetera, and usually because of ignorance, greed, convenience, or just pure meanness.

If you'll think about that for a moment,

you'll see what I mean. There are people that just -- they see that I do something for Earth, and they immediately go behind me and throw trash on the ground because they want to counter what I did.

Now, I can see a lot of dumb things
happening, not that I'm all that bright, but I
did listen to my mom and dad. And as I read
about this thing, I have a few points. My folks
taught me to clean up the mess after I did a
project and before starting a new project.

And as we travel around the U.S., we go to national parks and we go to state parks and we go to places where other indigenous groups are fighting pipelines or whatever it is.

And everywhere we go, we see messes. We see messes that industries like this industry is doing -- I can't say the last name -- but what this industry is going to do and what they've done already, we see messes everywhere. They won't clean up the mess.

And, you know, that's a simple thing that we learn in kindergarten, is clean up one mess -- when you get done with a project, clean it all up, and then come and do the next project. So

they ought to do that.

This in-situ mining is an experiment. We've been reading about this ever since we've been following this. We've been traveling all the way through California and other places, and we've learned about this. So we've been looking forward to coming here, my wife and I. And so we've been learning about this a little bit.

And it really is an experiment. They don't know that that water is going to be safe. They don't know that it's going to stay where it's supposed to stay. We've had a lot of evidence that it's not going to stay there.

So I don't think they should play with these people's lives out here for an experiment.

There's scientific ways of doing experiments, and it's controlled. And this is not controlled at all.

I will say, with all due respect, the EPA has got a terrible track record when it comes to overseeing cleanup. Again, I mentioned the cleanup, and we've been places where there's messes. The fracking around Chaco Canyon, you could not believe it, and the EPA is supposedly watching that.

In fact, any of these public hearings I've ever been to related like this, it's more of an opportunity for the EPA to make a check in a box on a checklist than it is to listen to your comments. So I encourage you to make your comments and make them strong. Thank you.

And in the Air Force, I was trained in shelter management. I was trained how to use a Geiger counter, how to put on a chem suit, how to clean somebody else off if they got chemical. And chemical attack was the enemy.

I want to mention, too, by the way, that I swore -- I see other veterans here, too, and you'll correct me if I'm wrong. But we swore an oath to protect this country and the people of this country against all enemies, foreign and domestic. And I see domestic enemies in places like this. So -- I'm sorry. I'm getting excited here.

But I learned how to use a Geiger counter, and I also could see what radiation could do to people when it's ingested. Most of this radiation you're talking about here is if it's ingested or breathed. Other radiation, if you touch it, get close to your skin, it affects

1 you. I've learned how to decontaminate. 2 And I've been hearing about these geological 3 faults in the area. Good evidence we just heard. And I just wonder, if the D-B is 4 5 allowed -- which I wouldn't be surprised at all, 6 even though I've heard this wonderful 7 testimony -- if they go ahead and get their 8 permits granted, if they're allowed, are they 9 going to issue Geiger counters and teach people 10 how to use them? Are they going to issue 11 chemical suits so people can put them on? Are 12 they going to teach them how to -- how to --13 sorry. REGIONAL JUDICIAL OFFICER SUTIN: 14 15 Mr. Martin -- I'm sorry, Mr. Bates. 16 apologize. Your time is up, so I need you to 17 wrap up, please. 18 MR. BATES: Okay. I hope they also teach 19 them how to decontaminate their neighbors and 20 their family. Thank you for your time. 21 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 22 Sophia Black Cloud. 23 Those who just came in, we're having 24 everyone speak at the podium up here because 25 it's very hard for the court reporter to see

you, because of the lights down below, to make sure she's getting every word.

So, go ahead.

SOPHIA BLACK CLOUD: Thank you again. My name is Sophia Mahpiya Sapa and Hunkpapa Lakota, the Great Sioux Nation.

I spoke at yesterday's hearing, and I was unable to speak on certain matters due to my nerves and emotions. They are rooted in these Black Hills. But I'm here again to speak regarding protecting our waters and the oath that you took to protect my children and uphold my entire family's treaty rights.

The problem we have here today is that uranium contaminates water with nuclear waste and poses a direct threat to our drinking water. Uranium mining only profits private companies' pockets, disregarding human life, our resources, and the health of the people who oppose uranium mining in the Black Hills of South Dakota.

Water is the main source of life for all living things, and we cannot afford the risk of contamination. Do the right thing. And in your hearts, clear your mind, smudge yourselves, and look into my daughter's eyes, my three-year-old

1 daughter -- I have four daughters and one son. 2 Look into their eyes and please, please for 3 their future and your children's and their children's future, stand up for what is right 4 5 and protect our water, protect our children, and 6 stop uranium mining, period. 7 And don't mine in the Black Hills. And 8 clean up the existing mines that are currently left unattended and uncared for and were not 9 10 disposed of properly before you even think of 11 mining again anywhere else. 12 And so with that being said, I just want to 13 quote my -- our great head, Sitting Bull, by 14 just reading a few of his quotes: Let us put 15 our minds together and see what life we can make 16 for our children. And another one: The white man knows how to 17 18 make everything, but he does not know how to 19 distribute it. Thank you. 20 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 21 Ms. Black Cloud. 22 Tonia Stands. Tonia or Tonia Stands? 23 AUDIENCE MEMBER: She stepped out. Janie Stein. 24 25 JANIE STEIN: So my name is Janie Stein.

I'm a legal resident of South Dakota, and I vote in Lake County. I value the rights of the Lakota people who never ceded the Black Hills.

I value the land and the ecosystems around the area that are risked and in all probability irreversibly damaged in preparation for mining, during mining, and after the mining, and especially the uranium mining.

As we know, everything is connected, and uranium mining in this area would affect lots of other areas, especially at the level of the aquifers. No permit should be granted, no permit should be discussed until all previous mines are completely cleaned up.

Genuine tribal consultation should occur.

Tribal-approved cultural and archaeological surveys should occur. Lakota translators are needed at these hearings. Do we have some?

If this water will be so safe after
treatment, why is the EPA planning to exempt the
Inyan Kara aquifer from the Safe Drinking Act?
This seems to me like another example of a
private, for-profit, and in this instance,
global corporation ramming their resource
extraction and environment-destroying project

down the throats of the caretakers of the land.

According to the World Nuclear Organization, the USA legislation requires that the water quality in the affected aquifer be restored so as to enable its pre-mining use. Usually this is potable water or stock water, usually less than 500 parts per million total dissolved solids.

And while not all chemical characteristics can be returned to those pre-mining, the water be usable for the same purposes as before.

Often it needs to be treated by reverse osmosis, giving rise to a problem in disposing of the concentrated brine stream from this.

After termination of an in-situ leaching operation, the waste slurries produced must be safely disposed and the aquifer contaminated from the leaching activities must be restored.

Groundwater restoration is a very tedious process. It is not yet fully understood. Even after considerable processes, various problems remain unsolved. Contaminants that are mobile under chemically reducing conditions, such as radium, cannot be contained, controlled.

If chemically reducing conditions are later

disturbed for any reason, the precipitable contaminants are remobilized. The restoration process takes very long periods of time. Not all parameters can be lowered appropriately.

The restoration scheme applied in some of these situations that the document is talking about was applied as the first two steps mentioned should be done.

It turned out that the water volume of more than 20 times the pore volume of the leaching zone had to be pumped and still several parameters did not reach background areas. So relaxed groundwater restoration standards have been granted at these and other sites since the restoration criteria could not be met.

Until the abandoned mines are cleaned up, there should be no consideration of new mining. The track record of uranium mining is not good. The tribal sovereignty and cultural issues have not been genuinely addressed. Our relaxed standard for contaminated water is not proper stewardship of our natural resources and turns the EPA into an oxymoron.

We all know that water is the basis of life. Please do the right thing and deny this project

1	as the risks are not worth it. Thank you.
2	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
3	Ms. Stein.
4	Endonnis Moreno.
5	ENDONNIS MORENO: Hello. I would like to
6	introduce myself in my traditional language.
7	(Speaking in indigenous language.)
8	Hello, my relatives. I would like to give
9	you a warm, a heartfelt handshake. My name is
10	Endonnis, and I am a young woman. I am 12 years
11	old. I was born in Pine Ridge Reservation, and
12	I live in Rapid City, South Dakota.
13	I was taught by my Auntie Tonia Stands that
14	spiritually is stronger than scientifically. So
15	I would so I know for a fact that according
16	to the Fort Laramie treaty of 1851, this is
17	Indian land, and what would the government do if
18	we broke a treaty? Thank you.
19	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
20	Mountain Man Scott.
21	MOUNTAIN MAN SCOTT: (Speaking in indigenous
22	language.)
23	I ask forgiveness in advance of the elders
24	and the people of this land. I do not know your
25	language well, and out of respect, I should or

at least have a translator here. So in the future, I suggest that happen.

Thank you for allowing us this time to speak. I'm a water-protector. I heard it said that you also are a water-protector. I can't think of a higher honor, at least for me. But it goes beyond water. It's all life. I don't get paid financially to be who I am. I am who I am because I was created to be this, and I'm grateful.

I had the opportunity not long ago up in Standing Rock to stand with some of the finest men, women, and children that I've had the honor of knowing, to stand up against great atrocities, much like many that have happened well over 500 years and many that happened that were far worse than what we're going through.

It shames me to know that these beautiful people from here have to continue to fight the same battle over and over and over and over simply so they can remain here on the lands that they were born on and their ancestors held in great regard and cared for and tended to, to have to protect them so that their children no longer have to be poisoned.

1 This is wrong. Every bit of it is wrong. 2 It disgusts me, and I have no understanding how 3 it could not disgust you. I hope it does. When you go home, please, look in your 4 5 children's eyes, look in your mother's eyes, 6 look in your grandmother's eyes, look in your 7 dog's eyes, in your cat's eyes, would you like 8 them to be poisoned? Do you think that's fair 9 and proper? 10 Technically you don't even have a right to 11 be on this land doing the things you're doing. 12 The things that you've done in the past, you 13 haven't cleaned up or cared for. These things 14 continue to poison these lands and these people. 15 And then beyond that, we have ranchers here 16 who raise beef to send out on the market that 17 your families across this country are going to 18 consume. Please consider these things. 19 Have a good day. REGIONAL JUDICIAL OFFICER SUTIN: 20 Thank you. 21 Jeremiah Moreno. 22 JEREMIAH MORENO: He wasn't Jeremiah. 23 REGIONAL JUDICIAL OFFICER SUTIN: Thank you 24 for clarifying. 25 JEREMIAH MORENO: (Speaking in indigenous

language.)

I just introduced myself in my sovereign nation's traditional language. My name is Jeremiah. My grandmother's name is Margaret Red Shirt. My dad's name is Francisco Moreno. My mom's name is Gracie Red Shirt, and my daughter, who was just up here a little while ago, Endonnis. And we all have Lakota names. And I introduced myself to all of you and to you up here in our traditional way. That makes us relatives now.

So a lot of -- just wanted to express some stuff. My students -- I brought some of my students with me. I work in Rapid City, South Dakota, and I work with the youth. And I work in West Middle School and Southwest Middle School, and we have an after-school program called Ateyapi.

And there, you know, we have a good time, and my students, you know, I express a lot of knowledge to my students, and they express a lot to me. One of the things that they expressed to me is that they wanted to be here today, so I brought them. And they are not my students, really. They are my nieces and nephews. That's

what I call them.

I wanted to tell you a little bit about what they did today. On their own, they walked down to the little arbor, and they got some water.

They tasted it, and they put some in a bottle, and they started drinking it on their walk over here from over there.

And it warmed my heart up to see that, to see them sitting over here wanting to get up and do something and make a stand for what they believe in.

I just wanted to let you guys know that you're sitting here on Indian land, and I would like to deny this uranium mine. It is going to affect our water, and we heard that from the testimonies from today. Just let me remind you, the 1851 Fort Laramie Treaty, that this is all illegal anyway. So (speaking in indigenous language).

Thank you for listening and have a good day. REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Angelina Rojas.

ANGELINA ROJAS: (Speaking in indigenous

language.)

Hi. My name is Angelina Rojas. I am 15,

and I am a young woman. I live in Rapid City, South Dakota. And I'm from Pierre, South Dakota. I was born in Pierre.

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And I have a quote from Evo Morales, he was a man, part of a movement for a social-political sovereignty people. And he said, "Sooner or later, we will have to recognize that the Earth has rights, too, to live without pollution. What mankind must know is that human beings cannot live without Mother Earth, but the planet can live without humans."

My people are here spiritually. Our ancestors watch over us. If you heard the creation story, you will learn. We need to respect our Mother Earth. To think that the future generation and our children will have to grow up in a world where we cannot respect our Mother Earth and only think of theirselves and their profits.

To my point, would you like your children, your grandchildren, the future generation to live in an environment that could have been protected if nothing at this point is done? Thank you.

25 (Speaking in indigenous language.)

1 REGIONAL JUDICIAL OFFICER SUTIN: 2 Pamp. 3 Hi. MIENGUN PAMP: Bonjour. (Speaking in indigenous language.) 4 5 My name is Miengun Pamp. I'm from Lansing, 6 Michigan. My clan is Wolf. I just figured if 7 everybody is introducing themselves in the 8 proper way, I probably should. 9 The thing that I missed last time was, I 10 wanted to say that what I saw at Standing Rock 11 was nobody -- nobody looked over on the lands. 12 Nobody respected what was there, you know. 13 I want proper geographic surveys of the land 14 that you guys are going to be putting whatever 15 holes in. Probably shouldn't do that anyways. 16 I'd say no to that, just for the record. 17 But I mean, like one of the most horrible 18 things I've ever seen is when, you know, these 19 people were allowed to make this pipeline path 20 or whatever, people watched bones being pushed 21 up out of the ground. 22 I don't know how many people heard about it 23 or saw pictures of it, but you could see it when that ground was, you know, pulled up. There 24 25 were bones sticking out of it. That was

people's ancestors, family members, grandparents, mother, fathers, children. It's a horrible thing, you know, that was allowed to happen.

So you know, it has to be voiced that that should be, you know, looked at, and it should definitely be looked at while under supervision of tribal members or something. Because from the sounds of it, from earlier testimonies, even if there are, you know, things found, Oh, let's just sweep it under the rug and pretend it wasn't there, you know. Oh, it's just meaningless.

It's like, Well, on religious grounds, you know, this is -- that's illegal, you know. Just on that alone, you can't -- you can't build there, you can't do whatever, you know -- wipe out the people living in this area because you want money or whatever.

It's disgusting that anybody would do that, like, let people do that, let people suffer for money, for things you won't even see, you know.

It should be denied on the grounds of, you know, just common decency, you know. It's horrible that, you know, someone who will allow

this and they see no benefit from it. Just, you know, I was told to so it's okay. I'll just let it go. It's just part of the job, you know.

Make a stand. Do something with what you're supposed to, you know. It's your job to protect these lands and protect all this. Like, otherwise we have to. That's when we have to come out here and do that. We have to come make a stand.

And you know, if the government agencies that were overseeing this stuff did what they were supposed to do, we wouldn't have to do that at all. It's completely ridiculous.

And like it was said earlier, this is Native land, and it is illegal to be here. And it's just -- just frustrating, you know. But at least do your jobs correctly. At least, you know, see things the way they should be seen instead of overlooking these things, just putting them under the rug, whatever, you know. It's just -- it's not my family, it's not my people.

These people have to live here. This is lasting effects. I don't want my kids to have to avoid South Dakota because their life will be

shortened by 20 years by drinking a bottle of water from here.

It's ugly, you know. These people tell stories of, you know, Oh, my mother brought me out here, you know, I drink from these waters, I learn things, lessons, cultural lessons, religious lessons, you know.

Who we are as a people is defined by these lands, and to destroy them is just spitting on us, who we are, who we will be, who are our kids are going to be. Leave something for them to, you know, learn from. Leave something for them to, you know, see. That's, you know, begrudged for time.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Tim O'Connor. Tim O'Connor.

Linsey McLean.

LINSEY MCLEAN: My name is Linsey McLean, and I am an environmental biochemist in toxicology for the last 40 years. I was born and raised in Flint, Michigan, and lived there for the first 55 years of my life with over 450 Class VII industrial dump sites in each of the counties in southwest Michigan, so I am well acquainted with environmental contamination of

all kinds.

In fact, this is the reason that I actually sought my course of study and pursued a career in the effects of environmental pollution on the living body of both humans and animals. I am also a federally approved expert witness.

I am submitting testimony on why it is necessary to include uranium in the metals tested for the MCL, for the maximum contaminant levels. Currently, uranium is not one of the monitored metals in wastewater for uranium mining sites, but should be.

Even if the other metals are under the MCLs, uranium can be nearly off the chart, as has been found to be in the old ISL sites that are attempting restoration. This has already been shown for several mines in Wyoming and Nebraska.

In Dewey-Burdock, waste injection wells will be sending plumes into the Minnelusa water as it flows south and east through Igloo, the Black Hills Army Depot, through Buffalo Gap, Oelrichs, and elsewhere and onto the Indian reservations that are already suffering contamination from the old pits near Edgemont, South Dakota.

Metals can bond with many different

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molecules which can then become completely different compounds with totally different chemical and biochemical personalities and activities. If they bond with inorganic substances, such as phosphate, oxide, sulfate, carbonate, et cetera, they will form inorganic compounds.

However, if they bond with carbon-containing compounds, they become organified and will then have different toxicities and different biochemical activity in the living body.

Organified metals have a significantly higher bioavailability in the living body and much more ability to travel to and target different organs and tissues of the body, interfering at the highest rate with normal healthy biochemical pathways than inorganic metals.

Organic metals are the substances of life itself. High levels of organified uranium have been studied and measured recently by the DOE, recent in old uranium mines. How did it get there when they're supposed to be extracting uranium? Well, let me explain.

Organified metals, including uranium, are known not to be recoverable by ion exchange

method of ISL recovery, which is commonly used, since it's already bound organically and will not bind to the organic synthetic resins.

So the levels will build up as the mining waters are recycled over and over in the ISL mining process until the water has become too saturated and are disposed as waste.

Organically bound metal under the circumstance will continue to increase in the wastewater of the ISL mine, adding to the metal burden of the wastewater and also the toxicity of such beyond what it would be if the metals remained in an inorganic and ionic form.

There should be very elevated levels of organified uranium and other metals in the Inyan Kara because of the contamination of the aquifer with microorganisms from open boreholes and decaying fence posts placed in the old boreholes so that -- and I emphasize this -- little recoverable uranium is there.

There should be minimum levels of actual mining uranium shown for the permit speciated and inorganic.

Organic forms of any heavy metal are able to penetrate the lining of the digestive tract much

easier than ionic and inorganic salts that are blocked by their electrical charges.

Organic metals act as a chelate, something that the health industry does to essential minerals to significantly improve absorption and also make them much more able to enter into direct biochemical reactions in the living body.

Selenium is another metal known to have wonderful health effects preventing cancer and enhancing thyroid hormone, but inorganic selenium, the form generated in ISL mining is known to cause birth defects of the highest severity.

Higher-evolved animals above microorganisms are not able to convert the quantities of the inorganic forms of minerals to detoxify, even the essential ones like selenium, into a biocompatible organic form. Plants and microorganisms do that in rivers and soils and can make heavy toxic metals even more toxic as they organify them.

The incongruency between actual toxicities of some chemical forms of metals and the actual regulatory levels is huge. Most toxicity levels fail -- charts fail to take into consideration

1 the chemical forms of the metals, which is 2 absolutely critical in assessing any toxicity 3 status, and currently are not being tested for. My recommendation to EPA is to upgrade your 4 5 testing of MCLs by including the speciation of 6 inorganic forms of metals and testing for 7 organified forms, including uranium, and then 8 compare the LD50 levels of each chemical form, 9 which are often orders of magnitude in difference. 10 REGIONAL JUDICIAL OFFICER SUTIN: 11 12 Ms. McLean --13 LINSEY MCLEAN: Only then can the true 14 toxicity of the wastewater you are testing be 15 assessed. REGIONAL JUDICIAL OFFICER SUTIN: 16 Ms. McLean, your time is up, so I need you to 17 18 please wrap up. 19 LINSEY MCLEAN: Using only a quantitative 20 analysis of the metals tells you nothing about 21 the toxicity you are actually looking for. 22 Thank you. 23 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 24 Georgia Holmes. 25 GEORGIA HOLMES: Thanks for coming. My name

is Georgia Holmes, and I am president of the City Council of Hot Springs in Ward 1. And I have a degree in medical technology, so I have a chemistry degree and a biology degree, and I want to make a statement, a very impressive one that was given to me recently that I'd like everyone in this whole place to take note of: Bad things happen when good people do nothing.

I have spoken two other times against issuing these permits at your hearings, and they were on my own personal items. My father was a mining engineer, so I know about the EPA, the bonding, the permits, and how they work.

Now again, I'm speaking to reconfirm the resolution by the City of Hot Springs. I've been on city council for five years, and it's taken us a while. But that was read earlier, and I do confirm everything that was said in that. It's impractical and extremely dangerous to deposit waste into the Minnelusa formation.

Our water wells for our own city here come from springs and Hot Brook Canyon, and I welcome you to come and look at them. It's a miracle, let me tell you. We have 117 wells in our city, and they are springs. Many of them are capped.

Our county has no zoning.

Please take note of this, Fall River residents. The EPA doesn't have enough funding, and neither does the Nuclear Regulatory -- Regulatory Commission -- there you go -- have the ability to take care of us. We are a small county, and we need help. Your permits probably will not cover that.

The bonding permits that will be given, if given to the holders, cannot save the fall -the Water Drinking Act of 1974. We will
continue to drink our water. We will not know if it is safe or not, I'm sure, because it will be monitored probably by hydrologists that are hired by the company.

And the EPA, I know. I feel for you. I know exactly how everything goes as far as funding, but I doubt it will be able to take care of us.

The first time I reminded the EPA at the EPA hearing that we live in a fault area with -from Yellowstone National Park, and it is part of my biggest concern. But I do think those of you that did bring that up, the first time, none of it was brought up.

The continuous uprising of our Black Hills will continue to move, and those faults will continue to move. What does that say about putting waste in our Minnelusa formation? It is not safe.

The second time I spoke to you, I also stated that these faults will affect our water aquifers, and as no secure process is available, we cannot guarantee it. And I spoke with you, and I believe you are sincere. It is not for you to necessarily be able to control all of that.

We have seismographic testing going on over at Provo. I do not feel that's safe either. What is that going to do to these faults? I do not know.

So I'm asking that both the Class III and the Class V permits be denied. And I speak for myself personally and also for the City of Hot Springs. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you, Ms. Holmes.

Mark Hollenbeck.

MARK HOLLENBECK: Good afternoon, and welcome to our area. We're glad to have you

here and, as well, taking testimony.

My name is Mark Hollenbeck. I ranch with my four small children and my wife north of Edgemont near the Dewey-Burdock project. We operate an organic ranch. We do grass-fed organic beef.

We use a grazing system that mimics the movement of the buffalo so we can improve our soils instead of degrade our soils. I believe over the years we have degraded our soils with modern ranching methods, so we have to return and look at new ways of doing that.

I also have a degree in chemical engineering from the School of Mines. And so what is the connection between organic beef production and nuclear power? In a word: Footprint. Organic grass ranching is the smallest food-raising footprint that I think I can make on the land in this environment.

When all forms of electric generations are evaluated, you'll find none of them are perfect. So which one are we going to use? Are we going to use coal or use hydro? Hydro is a very clean way of producing electricity, but we have to dam up our rivers, and we have to ruin all the

riparian areas. And there's not a lot of rivers left to be dammed.

We can use solar. Solar is very clean.

It's also a very expensive electricity. We have to have rare earth mineral mines in order to make solar panels. And solar power must be backed up by fossil fuels because it is not produced 24 hours a day.

We could use wind power. Personally, I find the blight of wind power on the landscape very ugly. And when I realize the massive numbers of birds that the wind power kills, the bats, the eagles, and it also must be backed up by fossil fuels because it does not operate 24/7.

Or we can do what most of use is coal. We can have large strip mines. We can have lots of transportation, by far the largest CO2 emitter of all of our methods, and we also produce huge amounts of ash waste with coal.

Nuclear is the only carbon-free method of producing large-scale, 24/7 electricity. It has the smallest footprint. And when you look at the amount of gigawatts it does generate, it's the safest method of making electricity as well.

Nuclear has its problems. We have to have

waste storage for nuclear power, and that has not been solved, although I think that's more political than science. We need to have recycling in nuclear power so that we can reuse the fuel instead of getting more new fuel.

But as we talk about the greenhouse effect, the last two days I've heard lots of people complaining that we weren't doing anything about the greenhouse effect. Nuclear power is the only large-scale method of generating electricity that can greatly reduce our carbon footprint.

There is no perfect solution. So when I started studying this -- I live there, and I went and visited ISR mines throughout the United States, and I have found that to be, by far, the smallest footprint of any generation facility that we have. I think it is very protective of the environment, and there are several misconceptions that I think I need to address.

One that was mentioned several times was that it will be fracking. We do not frack. If you fracked, you'd ruin the whole ore body, and it would be useless. Sulfuric acid would be used. Sulfuric acid is not going to be used.

Oxygen and carbon dioxide is what we're going to use.

There's also been some wide exaggerations on the water use. We're going to recycle 8,000 gallons a minute through the formation. We're not going to pump 8,000 gallons a minute out of the formation.

The water quality, I envy you people on this side of the county that can drill a Minnelusa well and get nice water. When we drill a Minnelusa well, we get saltwater and oil and usually not enough oil to recover.

And so that's one of the problems with communicating this, is that the formation is called the Minnelusa. Occasionally it's an aquifer, but not always.

But we refer to all the Minnelusa, and it sounds like it's an aquifer. Over here it's an aquifer. Over there, it's a saltwater and oil formation on the other side of the Black Hills. And so if you were having communication, you wouldn't have your pure water, you would have saltwater and oil in there right now.

And I know I'm out of time. I would just say that I've had my office on Main Street of

Edgemont for ten years. Anybody is welcome to stop in at any time, and I'll be happy to discuss any issues that you have. And by the way, I agree with the Hot Springs Resolution.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
Mr. Hollenbeck.

Kathleen Bailey.

Englewood, Colorado, stand here before you again to repeat loudly and clearly: I oppose the proposed aquifer exemption decision for the Dewey-Burdock uranium in-situ recovery site located near Edgemont, South Dakota, under the authority of the Safe Drinking Water Act and UIC program regulations in connection with Class III area permit to exempt uranium-bearing portions of the Inyan Kara aquifers.

The EPA has proven itself to have devolved into nothing more than an \$8 billion agency dedicated to supporting and promoting exemptions for the very industries that continue to cause massive environmental contamination, the legacy of which is left to the local residents for generations.

At issue, the portions of the Inyan Kara

group aquifers the EPA proposes to exempt, have historically been used for a source of drinking water, are currently used for a source of drinking water, and can be a future source of drinking water.

EPA's own current Title 40 146.4 declares, quote: The proposed aquifer exemption must not be a current or future source of drinking water using the criteria at 40 C.F.R. 146.4.

This latest grotesque and alarming action by the EPA to propose exemption of these portions of the Inyan Kara group aquifers blatantly ignores the existing original EPA aquifer exemption criteria found in Title 40 146.4 and sets a disastrous new precedence for opening up our ever more scarce and precious life-sustaining clean water aquifers that can be used as a source of drinking water to permanent contamination from oil and gas, UIC recovery and disposal wells, and uranium and other ISR mining activities that utilize UIC recovery disposal well activities, and any other in-situ solution mining.

The evidence of the convoluted joint efforts between the EPA and Azarga/Powertech to set this

precedence to change their own laws is spelled out in EPA's 11/17/16 Aquifer Exemption

Technical Memorandum done by Valois Shea.

As recorded in that 11/17/16 memorandum, EPA and Powertech worked cooperatively to manipulate the status of the current drinking water use from these targeted portions of the Inyan Kara group in order to eliminate the current use protection from exemption under the current 40 146.4 criteria.

And then they intend to eliminate the "or future source of drinking water" protection of an aquifer simply by considering -- simply by not including future-source drinking water in their aquifer exemption proposal.

If this proposed aquifer exemption were to be allowed, the future source of drinking water that now protects aquifers -- clean water aquifers, that protection of that status will be eliminated by this precedent-setting aquifer exemption.

Currently -- based on the 11/17 EPA memorandum, currently there are multiple wells. This is permanent well -- wells that were used and some are currently used as well water for

human consumption and livestock consumption.

There are multiple wells drawn from the targeted portions of the Inyan Kara aquifers that were historically and currently used for both human

and livestock consumption.

Many of these residences are simply currently abandoned, and therefore, the EPA and Azarga/Powertech can say for those residents they are -- there is no one currently using this water from the Inyan Kara group for drinking water.

But at least one resident continues to use the water, Well 16, from this targeted portion of the aquifer.

In order to create a no-current-use status from which the EPA and Azarga/Powertech are trying to base this particular aquifer exemption proposal, Powertech promised to permanently provide the resident with bottled water for drinking if they agreed to let Powertech sever and seal off the house -- the well to the house, the well to the home. The resident did agree, and the waterline from the well to the house was severed and sealed.

However, Well 16 continues to be used for

1	livestock for this resident. And at that
2	time
3	REGIONAL JUDICIAL OFFICER SUTIN:
4	Ms. Bailey, your time is up, so I need you to
5	wrap up.
6	KATHLEEN BAILEY: Okay. And I will continue
7	in minutes after?
8	REGIONAL JUDICIAL OFFICER SUTIN: If there's
9	time, yes.
LO	KATHLEEN BAILEY: Sure.
L1	But at that time, this was sufficient for
L2	the EPA in this memorandum to conclude, based on
L3	the CZA calculations, the EPA has concluded that
L 4	the portions of the Inyan Kara aquifers proposed
L5	for exemption do not currently serve as a source
L6	of drinking water.
L7	And the last meeting I attended, Valois
L8	Valois informed me that after this November 17
L9	memorandum in 2016, a March 6, 2017 memorandum
20	was created in which two of the mining wells
21	were simply pulled out of those UIC mining
22	well injection wells from that group because
23	they somehow devised that those two sites were
24	what fed that Well 16. However
25	REGIONAL JUDICIAL OFFICER SUTIN:

1	Ms. Bailey, I really need you to wrap up.
2	KATHLEEN BAILEY: Okay.
3	What the EPA also has not disclosed is that
4	residents is that once approved, the Class
5	III underground injection disposal wells have
6	been approved by the NRC for uranium mining
7	wastewater disposal to be made available for
8	injection disposal of other radioactive waste
9	fluids from other sources, such as a municipal
10	water treatment plant, well past when uranium
11	mining activities has stopped.
12	And per the USGS to date, there has been no
13	successful mitigation of the contamination
14	resulting from uranium in-situ recovery mining.
15	REGIONAL JUDICIAL OFFICER SUTIN:
16	Ms. Bailey
17	KATHLEEN BAILEY: So your current status of
18	future source of drinking water will be
19	permanently lost if this exemption is approved.
20	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
21	Please stop.
22	KATHLEEN BAILEY: Thank you.
23	REGIONAL JUDICIAL OFFICER SUTIN: Ben Good
24	Buffalo, please.
25	BEN GOOD BUFFALO: (Speaking in indigenous

language.)

A treaty is a contract between two or more sovereign nations. That is as binding today on the governments that signed it as when agreed to more than 100 years ago.

(Speaking in indigenous language.)

You violated all these treaties, our treaties. At the very beginning -- yesterday I was at Rapid City, two days of that comments, talking, and I kind of felt bad. I felt bad because what these two ladies are going through.

And all these people in our council, in our traditional ways, the men discuss what's best for the tribe. And they always consider the women the backbone of that nation. So there's a different government, different structure.

(Speaking in indigenous language.)

I can't see those at all. I said I heard a lot of what the women went through, and I felt bad. But (speaking in indigenous language) that's how you -- the White America is. It's always been that way that. A lot of our ancestors have told us about how it has been.

And we are a very spiritual nation. We are a warrior nation, but spiritually. In our

language, there is no cuss words. There is nothing bad. It's all humor. When something bad happens to somebody and I should get mad, they make it into -- they all start laughing.

A lot of what I heard here is not compromising. It's all power. Somebody wants this done. And I know -- it cannot be done because of what it represents.

(Speaking in indigenous language.)

When something like this is taking place when life are concerned, think about it. Think about it. (Speaking in indigenous language.)

The people, we think about it.

And I was thinking about this treaty here.

And I think sometimes this treaty belongs, this

EPA, this should be on the reservation. I don't

see them there. I don't even see them there at

all. That's where the people are. The people

are there to -- like him, Hollenbeck, they want

to talk to him, like you. And they want to know

what's the best direction, but there's none of

that.

And I personally can say this: Mni Wiconi.

This word means a lot. Mni Wiconi. Life.

Water is life. There's four elements that we

1	use in our spiritual ceremonies water, air,
2	fire, and Grandmother Earth. Grandmother Earth
3	makes an altar for us. It's universal. The
4	whole world is the altar.
5	Why would somebody come and start poisoning
6	the water? It's not good. Not good for our
7	coming generation, the seventh generation. The
8	seventh generation is a very important
9	generation for us.
10	REGIONAL JUDICIAL OFFICER SUTIN: Mr. Good
11	Buffalo, your time is up.
12	BEN GOOD BUFFALO: And today it's not going
13	to be I see it's not going to be dealt with.
14	(Speaking in indigenous language.)
15	I hope you study this treaty. I'm going to
16	pass it on to you other people. I hope you have
17	a job tomorrow.
18	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
19	very much.
20	Did Tonia Stands come into the room?
21	AUDIENCE MEMBER: She went to prepare a
22	meal.
23	REGIONAL JUDICIAL OFFICER SUTIN: How about
24	Tim O'Connor?
25	Okay. Next we can have Paul Nabholz.

PAUL NABHOLZ: I'm Paul Nabholz. I live
just north of Battle Mountain here in Fall
River. In the late '70s, I worked at Los Alamos
in modeling fracture flow hydraulics at the
Fenton Hill Geothermal project, so that was some
of the early fracking.

I was a drilling engineer on a National
Science Foundation drill ship doing geologic
research worldwide in the late 1980s. And as a
South Dakota professional engineer, I've
attended about ten years' worth of the
hydraulic -- western hydrology conferences up at
Rapid.

And I've been very impressed with the look of the in-situ mining. It's such a low-impact mining compared to the old open pit mines.

And then, I guess here about six or seven years ago, I drilled my own personal water well into the Inyan Kara that's 580 feet deep, and I've really enjoyed the water and don't expect it to change much.

I've been off-grid for more than a dozen years. I've been on solar electric power, and I installed solar hot water heating in the last three years.

Given that, I support the injection of wastewater into the Minnelusa because it's a cleaner solution than surface application via center pivots. And so I think that's a good way to handle the in-situ mining waste.

And I've been disappointed in most of the opponents that have not taken the time to study the mining issue with the Inyan Kara formation.

At the most recent Western South Dakota
Hydrology conference, Professor James Stone's
research showed that the majority of the freed
uranium after mining is trapped in the
formations within 100 feet of the mining zones,
so it keeps it out of the rest of the water.
It's not going to contaminate the entire
aquifers by any means.

And finally, I think that the Powertech project makes a lot of sense and will provide needed jobs.

AUDIENCE MEMBER: 80 needed jobs. 80. As opposed to 35,000 people who need their water.

REGIONAL JUDICIAL OFFICER SUTIN: Excuse me, sir. We're not commenting on other people's comments. If you would like to get up and speak on your own, you can do that. Okay?

1	AUDIENCE MEMBER: Okay.
2	REGIONAL JUDICIAL OFFICER SUTIN: Thank you,
3	Mr. Nabholz.
4	REGIONAL JUDICIAL OFFICER SUTIN: Next if we
5	can have Chas Jewett.
6	CHAS JEWETT: Hello. Hi. My name is Chas
7	Jewett. I'm a member of the Cheyenne River
8	Sioux Tribe. I'm a resident of hey.
9	I'm a resident of Rapid City, and I grew up
10	in on the Cheyenne River Indian Reservation
11	along the Moreau River. And the Moreau River is
12	in northwest South Dakota, and we had 103
13	abandoned uranium mines up there.
14	We can't drink the water up there well,
15	we can, just not the women and the pregnant
16	women and the children. Everyone else, go
17	ahead.
18	So that's what you guys are looking forward
19	to down here in the southwest because that's
20	what these companies do. These companies aren't
21	even from here. They come in here, they buy a
22	few politicians, have some really well-spoken
23	lobbyists that work for them. They say
24	"organic," and I want to throw up in my mouth.
25	But you know I think that we are a small

state, 750,000 people. We're a cheap date. You can come in here with a few thousands dollars, buy a few folks, and you can do whatever you want. But, you know, there's no regulatory authority looking over in the state. There's no water -- they changed the laws.

So you guys are the only people who can help us here. So help us, you know. You're here to listen to us, and we're telling you water is life out here. We need water to drink. We're all water drinkers in here, except for a couple of guys. Well, I don't know what they drink.

But, you know, we all need water. And we're not -- you know, this is -- you know, we've had a lot of different things that have come up here today. But what we haven't talked about is white supremacy, and white supremacy allows that for 500 years us, as tribal people, kept saying no, and it doesn't matter.

We said no to the project up in Standing Rock. And what did you guys do? They brought up guns and tanks. So we can say no. We've been saying no. Your consultation process is rigged for the industry, and all of this is really rigged for the industry.

1 But we the people, right here, are telling 2 you we don't want it. 98 percent of the people 3 in Rapid City said we don't want it. We don't want it. Listen to us. Hear us. 4 Thank you. 5 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 6 Ms. Jewett. 7 We are pretty close to 5:00, so I think that 8 at this point we will take the break, and we 9 will be back here again at 6:00. 10 So we will temporarily go off the record. 11 Thank you. 12 (A recess was taken from 13 4:58 p.m. to 6:00 p.m.) REGIONAL JUDICIAL OFFICER SUTIN: Good 14 15 evening, Everyone. My name is Elyana Sutin, and 16 I am the Regional Judicial Officer from the 17 Environmental Protection Agency in Denver, 18 Colorado. Thank you all for coming today. 19 will be chairing this hearing. 20 In addition to myself, we have several other 21 staff from EPA here to help assist, make sure 22 everyone who wants to speak has the opportunity 23 to do so. And I would like to introduce them to 24 you. Douglas Minter is manager of the

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Underground Injection Unit in the Office of

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Water Protection in Denver.

To my right is Valois Shea. She works with Douglas in the Underground Injection Unit.

Lynne Newton is in the back at the registration table. She also works with Douglas and Valois in the Underground Injection Unit.

And then we have Lisa McClain-Vanderpool, who is our public affairs specialist.

Sisay Ashenafi, who is also standing in the back by the registration table. So if you have any questions, please find one of those folks.

On March 7, 2017 -- excuse me. On March 6, 2017, EPA issued two draft Underground Injection Control, or UIC, area permits to Powertech USA, Inc., for injection activities related to uranium recovery near Edgemont, South Dakota.

Draft permits include a UIC Class III area permit for injection wells for the in-situ recovery of uranium and a UIC Class V area permit for deep injection wells for disposal of treated in-situ recovery process waste fluids.

The EPA is also proposing an aquifer exemption approval in connection with the draft UIC Class III area permit.

We are here today to listen to your comments

We are here today to li

on these area permits and aquifer exemption.

The public comment period is open until

May 19th, 2017. In addition to this hearing, we will hold another hearing tomorrow in Edgemont, at the St. James Catholic Church. We have also held four other hearings, one in Valentine,

Nebraska, and two in -- yesterday and Monday in Rapid City.

In a moment, Ms. Shea will explain in more detail what was proposed in the notice. But before I turn it over to her, I'd like to explain a little bit about how the hearing will work today.

We will take testimony from 6:00 to 8:00, and I will call speakers to the microphone up here on the podium if you have filled out a card at the registration table. When it is your turn to speak, please come up to the podium, and state your name before you begin your testimony.

In order to be fair to everyone, we are limiting testimony to five minutes each, and I please ask that everyone respect that time so that everyone has the opportunity to speak who wants to, especially if they haven't had the chance or the opportunity yet.

When five minutes has passed, I will ask you to complete your testimony. Please try to be as succinct and on point as you can. If I find that you're straying from the topic at hand, I will interrupt and ask you please to return to the issue before us.

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If we have time at the end and you haven't been able to complete your testimony, I will allow people to get back up and finish their comments.

After you finish your testimony, members of the panel may ask clarifying questions. not here to explain the basis of the proposal -the notice does that -- nor can we engage in a back-and-forth discussion of the proposal or respond to your comments during this hearing. The purpose of this hearing is to receive your input.

We will consider and then respond to all comments received during this hearing as well as all written comment in the final permits and aguifer exemption determination. As I said, we will not be answering any questions during the hearing.

We are recording the hearing tonight, so be

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assured your comments will be considered. court reporter sitting to my left will be preparing a transcript of tonight's proceeding that will be available for anyone who wants to see it.

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The transcript is part of the record and will be included in the docket for this matter. The docket is where EPA collects materials it has considered in its action, including public comments. The docket is available on the internet for your review, or you can view a hard copy at the EPA's Denver office. The transcript of this hearing will also be available on the docket.

If you have written copies of your testimony, please give a copy to our staff at the registration table, or you can hand it to one of us. This will be helpful as we prepare the transcript.

If you have other written comments or supporting documentation that you would like to provide, you may leave that with us as well, and we will make sure that it is entered into the docket of this action.

You may also submit written comments

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directly to the docket through May 19th. And instructions for doing so can be found back at the registration table.

Once the final permits are issued and the aquifer exemption determination has been made, anyone who participated in the hearings, either through oral testimony or written comment, has the right to appeal the Agency's decision to the Environmental Appeals Board.

So I will now ask -- or one other thing.

When you're giving your testimony, we will hold up signs when you have one minute left. It's -- a yellow triangle is one minute, and then when your testimony is done, the red stop sign indicates that your time is up.

So at this point, I will hand the microphone over to Ms. Shea, and she will provide a little bit more information about this project.

MS. SHEA: Good evening, everyone. Thank
you so much for coming back for our evening
session. And we really appreciate the fact that
you are here with us and providing comment and
listening to the comments of others.

As Judge Sutin said, we have -- the EPA has issued two draft Underground Injection Control

permits. One is for the injection to recover uranium from ore deposits in the Inyan Kara group aquifers.

With that draft permit is also a proposed aquifer exemption decision to exempt the uranium deposit-bearing areas of the Inyan Kara aquifers from protection under the Safe Drinking Water Act so that uranium can be mobilized and removed from the aquifer.

The second draft permit is for deep Class V injection wells into the Minnelusa aquifer. In addition to these documents, we have also issued an Environmental Justice Document and a Cumulative Effects Analysis document, and then we have a document that discusses our tribal consultation process to date.

We have received interest -- or intent of consultation from a number of tribes, and we have met with most of those, and we hope to continue this process and meet with additional tribes. We will not issue a final permit decision until our tribal consultation process has been completed.

So thanks again for being here. Your comments are important to us. As Judge Sutin

1 said, we will consider each of them before 2 issuing a final permit decision. Thank you. 3 REGIONAL JUDICIAL OFFICER SUTIN: We'll get started. 4 5 Our first speaker this evening, Chris Pannill. 6 7 CHRIS PANNILL: Thank you guys for coming 8 all the way from Colorado. I love your guys' 9 state. I have family there. So -- my name is 10 Chris Pannill. I'm a candidate for Ward 4 city 11 councilman, and I'm also a licensed emergency medical technician. 12 13 I just want to invite you guys, the EPA needs to come visit the Evans Plunge here in 14 15 Hot Springs because that is part of the Madison 16 aguifer. 17 And a lot of people come there to use that 18 to swim, to soak, a lot of -- to heal and stuff. 19 Our veterans in our community use that water to 20 heal and stuff. So we need our aguifers to be 21 protected. So let me just start. 22 We drink water. If these water aquifers be 23 contaminated, then we will have no clean water 24 to drink. As a licensed EMT, we will see more

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hospital visits. We will have more ambulance

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rides here to Rapid City. This means severe dehydration cases.

We must prevent these causes -- must prevent these cases from happening so that the ambulance EMTs and personnel can be used for serious emergencies, like heart attacks and stroke victims.

I will be quoting from the Emergency Care,

12th Edition on how water is used in part of the
human body. About 60 percent of the -- of the
body is made up of water, and without it, this
fluid, the functions of the cells would cease.

Water is distributed throughout the body both inside and outside the cells and balancing the distribution is an important part of maintaining normal cellular function.

Normally water is divided among the spaces in the body, with the following percentages representing averages. Intracellular, 70 percent is water that is inside the cells.

Intravascular is 5 percent; that is water that's in the bloodstream. Interstitial is 25 percent; this is water that can be found between the cells and the blood vessels.

We regulate the levels of water in our body

by drinking fluids and making excretions like uranium. This allows us to constantly adjust our hydrations -- the hydration based on the levels of activity. Inside our bodies, fluid is distributed appropriately through a number of factors.

The brain and the kidneys regulate thirst and eliminate excess fluids. Large proteins in our blood plasma pull fluid into the bloodstream. The permeability of both cell membranes in the walls of capillary cells determine how much water can be held and pushed out of the cells and blood vessels. Each of these factors help us regulate the amount of distribution of fluid.

If any of these factors were to be interfered with, fluid levels and distribution can become problematic. Dehydration is the abnormal decrease in the total amount of water in the bo- -- in the body. This may cause, by decreased fluid intake, a significant loss of fluid from the body by one or more variety of means.

Remember, however, that maintaining a balance of water while in a healthy

gastrointestinal system, severe vomiting or diarrhea can also become symptomatic. After the amount of water in the body, fluid can be lost as well as through rapid -- rapid breathing or a respiratory distressed patient and profuse sweating. Plasma protein in the body can be lost without injuries, like burns.

Dehydration from losing more fluid than the patient takes on is very common in hot weather, when the patient sweats a great deal of -- does not drink enough liquid to keep this fluid for this heat exhaustion. This is from Brady Emergency Care, 12th Edition from Daniel Limmer and Michael F. O'Keefe.

If our water is contaminated, then our youth will not be protected. Our citizens will not be protected. Our future is at stake. We must protect our youth and help our EMTs and first responders by leaving the uranium in the ground.

As a candidate for city council, and if I get elected, quote, I will fight to protect our youth and citizens of Hot Springs.

So I'm asking you to stop the mining in the wells to protect the American citizens. I don't see -- I don't want to see the Black Hills

1	become a third world country. I just hope
2	the
3	REGIONAL JUDICIAL OFFICER SUTIN:
4	Mr. Pannill, your time is up.
5	CHRIS PANNILL: from water I'll finish
6	real quick for World Vision to bring clean
7	water to 22 kids and families overseas. So
8	let's not turn the Black Hills into a
9	third-world country.
10	As I stated before, as a candidate for city
11	council, if I'm elected, I will fight to protect
12	Hot Springs, Black Hills, and the reservations.
13	REGIONAL JUDICIAL OFFICER SUTIN: Thank you.
14	Dennis Yellow Thunder.
15	DENNIS YELLOW THUNDER: How's that? Okay?
16	Good evening, everyone. My name is Dennis
17	Yellow Thunder, and I'm a concerned member from
18	the Oglala Sioux Tribe. I'm here tonight to
19	make comment on the UIC draft permits that EPA
20	is issuing.
21	But before I do that, I want to give you
22	I want to have something for you. Is it okay if
23	I give you just a handout? Okay. This if
24	you look at this
25	If you look on this sheet here, this handout

that I gave you, it clearly states on there that this -- and the story that I bought a bottle of water from the Hotel Alex Johnson when we were testifying there. I was at -- there was some hearings going down there concerning the same case. I bought a bottle of water there.

Happened to read the label. On the back of that label, it clearly states the Hotel Alex

Johnson bottled water is drawn from deep in the Madison formation at the base of the Bighorn

Mountains, Wyoming.

That clearly -- that's proof that that water, those aquifers that we're attempting to contaminate are all connected. The Madison, the Arikaree, the Inyan Kara, the Minnelusian, the Ogallala, White, all those formations are interconnected. You contaminate one, the Minneluzahan, you contaminate all of them.

I say again, if you contaminate one, you contaminate all of them. You pierce Mother Earth one time into that ground, into her system, and you inject this poison down there, you're going to affect millions of people. Not just this community here, not just the Black Hills area, but all the way down to Texas.

That's a long -- the Ogallala aquifer covers all of that.

I'm sure you're all well aware of that. You probably have wells in Colorado that are connected. Mr. Hollenbeck is getting oil and water from his well because of the fracking that's going on in the Colorado Plateau.

There's no difference in that.

I just wanted to go on record stating that I also have a personal stake in this battle, in the destruction and the poisoning that can occur to the human system. My daughter and I are faced with it every day.

When your child, when your granddaughter is born without an anus, without a kidney, and a heart on the other side, you have a personal stake in this. It affects us every day.

Would you -- I know you can't answer, but imagine, would you be -- would you -- how would you feel if your child, your grandchild was affected in that way by the poisoning of the water?

And that's just not my granddaughter.

There's seven different reservations going down
that way that water is going to flow through,

every one of those reservations, everyone has a granddaughter, a grandson, daughter, sons that are going to be affected by this.

You have to look at the big picture. That's who's going to be affected by it, along with everybody else in here that has granddaughters and grandchildren and children and the future generation.

Very honored to see the youth here today, expressing themselves from their heart. The contamination that they fear is going to happen.

But quickly, I want to mention a few things. We've met before, Valois, Mr. Minter. We've met here in Hot Springs, we've met in Bismarck, we've met again in Rapid City covering these same things. And there were some issues that came up then that date back several years.

Number one is we need to conduct independent cultural surveys on the Dewey-Burdock area. EPA should require borehole identification plugging. Fence posts and sloppy sealants ain't going to work.

EPA should require additional pump tests.

Existing data is admittedly incomplete. The EPA should also require, prior to permitting, no

staged process. And also very important, this is EPA's first UIC permit. You've got to do it right, got to be careful what you do.

And you're putting the cart before the horse again by issuing a draft permit while all of these safety regulations haven't been met. So you're putting the cart before the horse. If you remember, the ASLB required you to do consultation again, do adequate consultation with the tribes. And you'll find that all of these tribes are opposed. I'll stop there.

Thank you very much for your time tonight.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you,

Mr. Yellow Thunder.

Perry Holmes.

PERRY HOLMES: My name is Perry Holmes. I'm a resident of Hot Springs. I've lived here for over 30-some years and have been a resident of the Black Hills longer than that.

I am opposed to the Dewey-Burdock Class III injection wells and aquifer exemptions and Class V disposal wells. The absolute main reason I'm against this is I drink water. And I notice a lot of you have plastic bottles up here, but there's a water fountain out front. And I'm

wondering if this goes through, we'll all have to carry plastic bottles around after a bit.

My wife's family have been miners in the Hills, and I know that most of them probably oppose using aquifers for getting rid of junk from your mines and stuff like that. I have children and grandchildren that I hope will be able to use this water.

The information about this stuff that you're dumping back into the wells proves basically it is dangerous and poisonous, otherwise they wouldn't be trying to get rid of it.

We have people coming to the Hills through the tourist agencies and stuff like that. That is a rather large business we have here. Will those people all have to be bringing a lot of bottled water with them to see Mount Rushmore and Crazy Horse?

And will they also have to -- will we have to close down Evans Plunge because of contaminated water that's coming into our system? This is something I know a lot of people haven't talked about, but that is a big business in our area, the recreation and tourism.

1 I think most people in mining and stuff that 2 have been mining in this area even would agree 3 with me that this is probably not the brightest 4 idea of dumping waste material back into an 5 aquifer area. 6 I hope to be able to live here and even be 7 buried here with my children. And I hope it's 8 not because of the water that I have to be 9 buried. 10 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 11 Mr. Holmes. 12 I'm sorry if I got this wrong. Melody 13 Suchumek. Melody? 14 Will Leigh. 15 WILL LEIGH: (Speaking in indigenous 16 language.) 17 My name is Will Leigh, and I'm 21 years old. 18 I'm from Virginia. And I would like to ask --19 if you could imagine the laugh that your 20 grandchildren are going to have or whose laugh 21 they are going to have, whose eyes they are 22 going to have, or maybe your child's grandchild, 23 what little quirky saying they're going to keep 24 living on that came from you or your sister or

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somebody that you love.

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And then imagine looking into those same eyes that come from you or your husband and having to explain why the way things are with the water, why and how things weren't always this way.

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I know that a lot of the people that came here are proud to bring up their children as water-protectors, as people who value the earth. And so I guess what it comes down to is there might be different versions of reality at play here.

And I know it's kind of weird to say that there's more than one reality or something, but when there's -- the biggest question I have is, Why? Why are you doing this? And why -- why are you taking, coming here and -- sorry. Just a little bit nervous.

You guys have control. You're in control of how this goes, how this is set up, and what becomes of all these people coming up here and saying these things. The reason you're in control is because of 500 years of genocide. And that's something that you're going to continue if you approve this.

Right now, you have the chance to be

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water-protectors, too. And I hope that you'll realize where the power that is invested in your Agency, it's -- what it came from.

And when there's so many people involved in an agency and so many different decisions are broken up into so many different parts, it might be easy not to feel responsible, but you guys have the power. You set this up, and you're making this decision. So that means you have the responsibility.

And that's something that I'm glad that I can be able to look into my grandchild's eyes and say that I took that responsibility, whatever that I had, and I used it to protect the water.

(Speaking in indigenous language.)

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Theodore Ebert.

THEODORE EBERT: My name is Theodore Adolph
Philip Ebert. I've been going at this with
these deals for -- since the beginning. I'm one
of the original opponents that filed suit
against Powertech to stop this in federal court.
So I've been in this from the beginning. I

appreciate all of you being here. Even you, Mark. Good to see you again.

I say that because, Mitakuye Oyasin, I believe this, we are all related. We're all here on this planet, and we're all here for a reason. Tunkasila didn't put each other, all of us in each other's life for no reason. We're all here because this is where exactly we're meant to be right now. Everyone here is meant to be here, all right here.

We have to choose what we are going to do.

I can't believe the pressures that you guys are
under. You know, your director of the EPA just
got terminated or he quit or whatever because of
the pressures that were being put on him.

So I can understand that you guys are under those same pressures. But if you make the wrong decision and it's not politically correct, I won't be seeing you guys again.

And I would not want that on you. Because you have families. I respect that. I'm a soldier. I was a soldier. I fought for this country. I faced the enemy. I had bullets going by my head, men dying near me. I was lucky. I came through those things unscathed.

Those guys are all my heroes. They are all my heroes.

There was a time that I lost sight of who I was and why I was there. I lost sight. I became just a machine. I no longer saw a wounded man or cared. I no longer saw an enemy before me, just an object, meant nothing to me.

My commander noticed that, and he sent me home for a brief time. He said, Go see your family. So I was at home. I sat there for a long time. I said nothing to anyone.

One of my aunt's children came up to me and sat there with me. And it took me a while, but I realized that I regained who I was. I became okay with being a soldier again because I realized why I was there. I wasn't there for me.

I was there for everyone here in this room that never would have to do what I had to do so that they would not have to face those things.

I was there for my children, for your children, for your grandchildren, for your great-grandchildren, so they'd have a place to live on this great planet.

Now, this is about water here. This isn't

about uranium ore. It's about water. This corporation -- and you and I know both know, you're learned people. You've been doing this a while. You've seen the international community and how it works.

So you and I both know that if you give these people that water -- and it's not 8,000 gallons a minute. I understand that they just increased the request to 8 billion gallons a year; is this correct? If I'm wrong, tell me I'm wrong.

That equivocates closer to 15,000 gallons a minute. Now, this is a free gift. This is not anything that these people are going to be charged for. This is free to them. They do not even have to mine uranium there.

They can open up a water bottling plant out there, and they can sell that water to whomever they choose. Once they have this permit, that's all they have to do. They never have to mine uranium out there. The water is a gift to them, free. They can do with it what they want. So I'm definitely against this. I hope you can see that.

I know Mark knows that. Him and I, we

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sat -- we eat lunch together sometimes, so we understand each other. We both have families. He's got a family. I got a family. We respect each other in this way.

So he knows, that man knows I'm not his enemy. From my heart to his, he knows that. He knows that as a member of this community, in the event that all this falls through -- and he's on the verge of losing everything he has.

He knows that us as a community will come together to help him in any manner we can to see to it that he makes it through that. We know that, and he knows that. I told him that before, too.

So anyway, you guys, I wish you the best in your decision-making process, and I'm sure happy that I'm not in your shoes. Sometimes you just gotta do what's -- just because it has to be done. I've lost many jobs. I've got court-martialed a few times, and I paid the price for things that I just refused to do and I said this isn't going to happen, not on my watch.

So bless you guys. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you,

Mr. Ebert.

Susan Sugzda -- Sugzda. I'm saying that wrong.

SUSAN SUGZDA: Pretty close.

Good evening. I'm Susan Sugzda from the western Custer County area. I've done a little basic cost input analysis, and the costs of this project would be thousands of gallons of free water from aquifers in a drought-prone area.

Benefits: One would be lots of money, I guess, to the companies, which I understand are Canadian and Chinese, and in the future likely others will want to also have the chance; and a few local jobs, which I believe will turn out to be fewer than we've been led to believe probably, possibly.

So the result is that the benefits simply, in my opinion, don't -- are not worth the extensive cost. In the past around here, companies that have done mining have simply gone bankrupt and disappeared.

So are there bonds being expected from the company to pay for the desalination and the decontamination of the free water to them that then becomes kind of costly to the rest of us

1 left with the problem? 2 The EPA stands, obviously, for the 3 Environmental Protection Agency, and we ask that 4 you do what we pay -- we taxpayers pay you to 5 do, and that is to protect our water from 6 contamination. Thank you. 7 REGIONAL JUDICIAL OFFICER SUTIN: 8 very much. 9 Tasina Sapa Win. 10 TASINA SAPA WIN: (Speaking in indigenous 11 language.) 12 My name is Black Shawl Woman. I am from the 13 Cheyenne River Sioux Tribe from a little 14 community called Swift Bird. I live right by the Missouri River. 15 I'm also here to talk on behalf of the 16 17 International Indigenous Youth Council. And 18 what we are is a grassroots organization that 19 started in Standing Rock that empowers youth in 20 their comm- -- or to become leaders in their 21 indigenous communities through activism that 22 primarily circulates around social and 23 environmental justice, treaty recognition, and tribal sovereignty. 24 25 I'm -- I could come up here and give you a

huge speech. I could give you a bunch of statistics. I could tell you pretty much everything that you've already heard from these fine people in this crowd.

But instead, I'd rather tell you exactly what comes from my heart. And I'm looking at you right now in your eyes, and I'm going to plead with you to make the right decision here.

I'm also a young mother of a beautiful five-year-old boy. He will be six here in a couple weeks, and he changed my life at a young age. And I made him a promise when he was born, and that was to protect him at all costs.

And by protecting him, that's why I'm standing up here, not just him, but for all children of our future.

Where I come from, Cheyenne River deals with a lot of addictions that are like alcoholism, meth addiction, gambling. The list goes on.

Addiction has enablers. These companies and this government are addicted to nonrenewable energy.

And just like all addictions, they have enablers. The EPA is being an enabler to addicts. Addictions to what? The cruel profit

of indigenous resources -- money, power, and greed.

Just like all addictions, they need -- they need help, and I'm begging that the EPA help this country. These companies are foreign. How could you let foreign companies come into this country and drill toxic, lethal chemicals out of the earth and then not clean up after themselves? That jeopardizes our health, my son's future, clean aquifers everywhere.

I saw your presentation yesterday, and I seen a point that you made saying that the aqu- -- the water that you found underneath is undrinkable. Yeah, maybe undrinkable to humans, but it's not undrinkable to the earth. It's not undrinkable to the soil. It's not undrinkable to the plants or the rivers that it will be flowing into. We need water.

I mean, Standing Rock and the indigenous people of this land have shook the world, opened the eyes of the public, and now we are saying to stop. Please stop. We don't want to be sick anymore. We don't want cancer rates skyrocketing, diseases going unexplained.

Mni Wiconi. Let that stick with you,

1 please. Because it is life, not uranium, 2 nuclear power to fund -- I mean, they are going 3 to be using it for nuclear energy, foreign companies, some of which are not even allied 4 5 with the United States. 6 So you're going to be helping companies that 7 are foreign that are not exactly allied with the 8 United States for nuclear power? That's scary. 9 And it should scare you, too. 10 So what I'm asking one last time, you know, 11 is please respect us. Honor our treaty of 1851, 12 1868. Honor our indigenous rights as people --13 not just as indigenous, but as human people. 14 This is not just as an indigenous problem. 15 This is a human problem, an all-life 16 problem, all of life -- the four-legged, the 17 wind, the water, the plants, the earth. And 18 it's a serious problem. 19 Please start respecting us, or you'll be 20 expecting more of us. Thank you. 21 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 22 Dr. Hannan LaGarry. 23 DR. HANNAN LAGARRY: My name is Dr. Hannan 24 LaGarry. I am a professor at Oglala Lakota 25 College on the Pine Ridge Reservation.

In 2014, I served as an expert witness on behalf of the Oglala Sioux Tribe and the consolidated interveners in opposition to Powertech's license renewal.

As part of that proceeding, I had the opportunity to review some belatedly disclosed data from Powertech after the hearing had concluded.

On November 12th, 14th, and 15th in 2004, myself and three student assistants reviewed drillers' notes and borehole logs prepared by the Tennessee Valley Authority that was disclosed by Powertech. This review was conducted at the Powertech offices in Edgemont.

We were able to review drillers' notes from 4,177 boreholes, 56 percent of the total of 7,515 that were available to us. In this data we found written records from drillers of 140 open, uncased holes; 16 previously cased, redrilled open holes; 4 records of artesian water; 13 records of holes plugged with wooden fence posts; 6 records of holes plugged with broken steel; 12 records of faults within or beside drilled holes; 7 notations, "Do not record this value on drill hole maps"; 2

notations, "Do not return this data to the landowner"; and 63 redacted borehole logs.

Redacted borehole logs are those things you see in top secret documents where they are blacked out. So the TVA had some secrets to keep.

Many of these notes contained references to water at various levels and poor, muddy, or destroyed samples coming from the holes. We also found that in the datasets we reviewed, lots of records had been moved or were missing. This data, Powertech attempted to suppress it, but the Atomic Safety and Licensing Board overruled them.

When it was time to make this testimony public, Powertech objected, but the Atomic Safety and Licensing Board overruled them. In the final partial initial decision, this testimony resulted in license conditions requiring Powertech/Azarga to exhume all 7,500-plus borehole logs and examine them to make sure that they were properly plugged. This work has not been done.

Powertech appealed this decision and these license conditions, but the Atomic Safety and Licensing Board denied the appeal, and those

1	license conditions stand to the present time.
2	Thank you.
3	REGIONAL JUDICIAL OFFICER SUTIN: Thank you
4	Dr. LaGarry.
5	Tonia Stands. Tonia Stands.
6	TONIA STANDS: Hello again. Hello again.
7	I'm Tonia Stands.
8	(Speaking in indigenous language.)
9	That's my Lakota name, first Lakota name.
10	So I hold that with all my heart because my
11	grandma gave that to me. I really honor that.
12	And the reason I'm going to tell you about
13	my grandma and my Lakota name is there's a huge
14	ancient connection through me that is, I guess,
15	intellectual property. I'm not a scientist.
16	I'm not I don't have no American degree.
17	But through me time has passed through
18	me, and I know things about this place and about
19	this water.
20	And you know, I look at you, and I think I
21	would love for you to understand what this place
22	means to them, the whole nation of people that
23	speak Lakota, Dakota, and Nakota language.
24	We're all one nation.
25	And we don't and we come out of the

ground. We come out of Wind Cave. You can go to Wind Cave, and there's a nice little sign that points at a hole in the ground, and it tells that story. And you can't take that away from us, and you can't deny that.

And we -- we -- they made this country on a religious freedom, you know. It's the constitutional right we have, religious freedom. And you know, it -- and I'm -- I'm -- I was born in 1978. And in that year, in 1978, as old as I am, that is as long as we've had religious freedom.

We can't go access these sacred sites

because now they are in -- not on our property.

All I can tell you is this is the mecca, this is
the center of the universe. We have -everything is a relative. We have a Lakota,

Dakota, Nakota name for each element that
science hasn't even caught up with.

We have cultures that are like polar opposites. And the reality is the President is the center of everything, but in our way of life, it's the inner circle. That -- that's who we -- that's who leads us -- our children, our elders, never, ever, ever a man.

And we're led -- and our people are led by the women. We're natural multitaskers. We can just have this all figured out and food on the table, everything done, and smiling. So -- and we honor that.

And you guys come from a culture that's, again, the polar opposites. And you look at that, and you don't even have -- you couldn't even vote. You couldn't even vote. That's how -- that's how in that little amount of time that you've come, but yet we lived that since the beginning of time.

So anyway, I come from Oglala, which is about, you know, as the bird flies, right over here. Well, through my family that comes from there, our territorial homeland guardians, we go south, my grandmas that raised me.

So they brought me into this area and, you know what, I grew up off the land. I didn't have running water, electricity. I lived in a house that my grandpa built, my great-grandpa. And my great-grandpa, we lived here, and we were pushed back to a reservation, and we couldn't come back out here without a pass.

So my grandmas come through Hot Springs, and

1 they used to tell the story, and they used to 2 cry. We don't go through Main, we go right up 3 There was an old road through there. here. And they told the story how when they would 4 5 come, everybody would come out of their houses 6 and stare at them and throw stuff at them, and 7 it was sad. They took that connection away. 8 REGIONAL JUDICIAL OFFICER SUTIN: I'm sorry, 9 Ms. Stands, but your time is up, so I need you 10 to wrap up, please. 11 TONIA STANDS: I'm going to come back, 12 though. 13 REGIONAL JUDICIAL OFFICER SUTIN: Please do. 14 Thank you. Jackie Gericke. 15 16 JACKIE GERICKE: My name is Jackie Gericke. 17 I, my husband, and two small children moved 18 from Ocean County, New Jersey to Hot Springs, 19 South Dakota 25 years ago. Before we moved, we 20 didn't check the local business climate, we 21 didn't check out the schools, we didn't 22 seriously investigate the housing market. 23 Although I had a three-month temporary 24 position, we didn't even have permanent jobs. 25 We moved here for the beautiful night sky, for

the clean air, and especially the clean water.

You see, where we moved from, our local wells had become contaminated. Luckily, there was another source of water. It was the Cohansey aquifer. All of our relatively shallow wells were mandatorily capped, and a municipal water system was hurriedly installed.

Problem was, I felt that it was only a matter of time before the aquifer itself was contaminated, and there was only sand between the wells and the new municipal water source.

Another environmental issue that caused us to leave our home was the fact that we lived only a few miles from the Oyster Creek nuclear power plant. It's been clearly shown that there are much higher rates of cancers among people who live and children who are born near nuclear power plants.

While there, we were involved with what is known as the Tooth Fairy Project, where researchers collected children's baby teeth to measure the amount of radioactive strontium-90 that was contained within those baby teeth.

Strontium-90 is emitted by power plants, nuclear weapons testing, fallout, and other

sources of radiation. Because it so resembles calcium, the body is fooled into depositing it into bones, in children's baby teeth where it forever emits radiation.

The children in our county showed a statistically significant higher amount of radiation in their teeth than children in other areas.

My health means more to me than money. Your health means more to me than money. Clean water is our most precious resource. We drink it. We bathe in it. We cook it with it. We water our pets and livestock with it. We water our gardens. Water is life. And that single resource, clean water, is worth more than any amount of gold we receive from a short-lived, short-sighted mining program.

There's not many places that can claim to have the water resource we have. We are talking pristine, untouched, unspoiled, nonrenewable aquifer water which took thousands, if not millions of years to form.

We shouldn't even consider any project that could jeopardize this incredibly valuable resource, especially when the consideration is

for the material wealth of a few.

I am here today to ask you to consider the future, when clean water is even more rare than it is today. I moved here for the water. I've met others who have moved here for this clean environment. There are people who live here for this clean environment.

Extreme conservation must be used. I know you'll take extreme care in making your decision, and I pray that it's the right decision.

I never in a million years expected to be before the Environmental Protection Agency of the United States and ask that you please not allow our water to be poisoned. But that is what I am doing here today. I am asking that you not allow our water to be poisoned.

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

Debra Johnston. Debra Johnston?

Lisa Wolf.

LISA WOLF: Greetings. Thank you. I sent in a written statement by e-mail, but I had to speak when I heard comments about how safe nuclear power and nuclear waste are.

I'm the chairwoman of a Nevada nonprofit called the White Buffalo Nation. We are dedicated to mending the Sacred Hoop of Life.

My youngest daughter was born in a barn in the straw in Wisconsin near where Miracle had been born in 1996.

And I came to South Dakota the end of
February to help with the reestablishment of
Oceti Sakowin traditional government. I do a
radio program I've been doing since -- well,
Standing with Standing Rock, Savage Sovereignty,
and Water Protectors we've been doing since
August because this is Lakota, Dakota, Nakota
land.

Today as we -- as you consider permitting the request of Powertech/Azarga, the West Lake Landfill is on fire underground in Montana. The Hanford Nuclear Site in Washington state has seen a tunnel collapse. According to my friend Bob Nichols of Veterans Today, Your Radiation This Week, we are at evacuation levels for radiation pretty much across North America as it is.

In fact, Pierre -- Pierre, South Dakota is reading at 7,929 counts per minute, and I

believe safe levels break off at 100. This is from EPA data, by the way.

So one of the things that we've been focusing on on my radio program, which is titled Utopian Realities: From Concept to Planetary Restoration/S.L.O.P.E. Earth Aid Now, is solutions to extinction-level threats. We feature scientists, such as Professor John Searl, Searl Effect Generator, reenergy, radiation remediation. We feature people who have products that bioremediate the body to drop heavy metal toxicity.

And now I live in Hot Springs, and I've been getting water -- I was getting water from Cascade Springs. And then Susan Henderson told me that, as far as she knew, it was radioactive. So I spent the morning on the phone with the USGS and found in fact that there are showing to be high levels of strontium.

And then it was suggested to me that I reach out to friends from Pine Ridge and Wounded Knee and ask that there be a Standing Rock-style encampment in Edgemont. And then I was told by another person that that wasn't wise because the airborne radiation there from those open

1 boreholes and the uranium mining that's already 2 happened is so high that it's not safe. 3 So I would ask the Environmental Protection Agency to be matriotic, to love this land, and 4 5 to put your time and your energy and your money 6 into supporting alternatives, into supporting 7 healing the earth, instead of supporting a death 8 machine and a death culture. 9 There's no need, and it's time to tell 10 people what's really going on. My friends who 11 are scientists laugh at the thought of nuclear 12 power plants and how ridiculous it is to cause 13 so much damage to boil water to make power. 14 REGIONAL JUDICIAL OFFICER SUTIN: Ms. Wolf, 15 your time is up. 16 LISA WOLF: When we all know that those 17 materials ultimately are for weapons of 18 destruction. Let's support life. Thank you. 19 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 20 Ms. Wolfe. 21 Joseph Farrell. 22 JOSEPH FARRELL: Hello. I am Joe Farrell. 23 I'm a licensed Wisconsin master plumber. I have 24 a plumbing contractor's license in this state. 25 I was a licensed well pump installer in the

state of Wisconsin.

So that people don't engage in ad hominem arguments, I have worked in nuclear power plants. They are one of the safest places you work because if you make a mistake, the results are catastrophic. So I have a lot of respect for how dangerous nuclear power is.

I'm not philosophically opposed. I just think there's got to be better alternatives, given the fact that they still haven't figured out what to do with the waste and because it's so dangerous, you have to work so carefully around it, so as not to really create another Chernobyl. But my concern is not based on that. It's -- I'm concerned about the 4,000 wells that are going to be drilled there.

Right before Hannan's presentation, I was going to say that on a very conservative estimate, a half a percent failure rate nobody is going to dispute. That means at least 20 of those wells are going to be open sources of contamination.

And what worries me and -- is the fact that they are using oxygenation. And in Wisconsin, we were weren't allowed to chlorinate wells

because it's an oxygenation process that releases arsenic, and we had a lot of arsenic over in some of the aquifers there.

And the hydrologists made some mistakes, and the arsenic was traveling places they didn't expect. The solution was they drilled wells into aquifers that were deeper and were safe.

They had some well drillers who got sloppy, had -- the annular's places were not sealed correctly, and they created an open source of contamination into the contaminated aquifer.

So I'm real concerned about those wells.

And this may sound really callous to a lot of people in the audience, it's not humans and drinking water I'm worried about because there's a lot of plumbers and equipment installers, they'll sell you for a really expensive price, there's ways to get water safe to drink for humans. They'll make a lot of money doing it.

I'm not going to be one of them because I'm not into that.

But my big concern is that if -- and most of the people who are proposing this are proponents of these wells. If they are wrong and their calculations -- because no one seems to be

disputing them.

If they are wrong in their calculations and they ruin the aquifers, I live over in Oral.

All my neighbors are ranchers. Some of them I know are third generation, there's probably some fourth generation over there. You're not going to be able to save the beef in this state.

No matter how good your marketing campaign is, you know, "Eat South Dakota beef; it glows in the dark" is just not going to cut it. So you're going to destroy the beef industry.

I really wish there would be more ranchers that would show up at this. I understand it's -- for Native Americans, I understand the respect for the earth and stuff.

But the ranchers, they need to get on board opposing this. Because if the Powertech is wrong and their data is wrong and they ruin that aquifer, the face of South Dakota will change.

We'll no longer be a community where I live of ranchers. That's all going to go away.

There's generations who have done that, and that's all going to go away. And so I have a real concern about those wells.

And I'm going to get in touch with

Dr. Hannan. Yeah, those guys are a lot sloppier than I thought. Having worked in a nuclear power plant, I thought they would be a lot more careful. They are really sloppy in their well drilling.

You need to really regulate them. You need to have an NRC person on every well if they are going to continue to do that because you need to have some stern controls. They are not controlling themselves, and probably because they are an outside company.

And that's all I have to say. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you very much.

Roger Pfeifle. Roger Pfeifle. Sorry if I pronounced your last name wrong.

ROGER PFEIFLE: My name is Roger Pfeifle.

I'll read here what I wrote.

I've been trained as a chiropractic doctor; therefore, my concern is not just about the water, which is an immense concern, but also about the overall quality of life pertaining to the human condition. For example, the health of the humans and the environment in which we live.

It is therefore prudent to consider the

purpose of the uranium operation, which is obvious: Feed the nuclear industry, which feeds the nuclear threat of water contamination.

That's what they're going to do with this uranium.

Corporations have been proven to be sociopathic. The power structure of the human race has proven -- the power structure of the human race has proven itself to be psychotic and severely corrupt.

You who sit in regulatory positions are playing a fool's game if you think you can be reasonable with these institutions. True human beings do not want to live like this. If you are making excuses for this industry, you are losing your humanity.

This should concern you. It should also concern you that there is an international justice movement gaining traction on the planet, and anyone involved in the degradation of and threatened -- and threats to human life is going to be held accountable.

You are on this list if you allow this malicious insult to our beautiful homeland, our beautiful Black Hills, our beautiful lives to

1 We have heard all the promises and continue. 2 assurances of the corporate hierarchy. You 3 should know by now they cannot be trusted. I pray for your well-being. I pray you -- I 4 5 pray you have the courage to handle the immense 6 pressure this question is asking. REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 7 8 Danielle Rose. 9 DANIELLE ROSE: My name is Danielle Rose. 10 live in Hot Springs and Eagle Butte. 11 (Speaking in indigenous language.) 12 My Lakota greeting was I greet each of you 13 from this side of the room all the way around to 14 here with a warm heart and a hearty handshake. 15 My Lakota name is First Cloud. I was named 16 after Chief White Swan's -- one of his three 17 daughters, First Cloud. I'm a tribal member of 18 Cheyenne River, and I grew up near Green Grass. 19 Today I want to express my disagreement with 20 the permits by using the medicine wheel. Most 21 of you know, that's divided into four quadrants 22 with the colors yellow, white, black, and red. 23 Well, those colors represent the races. 24 Yellow is for Asian or Oriental, and they're 25 responsible for spirituality. White is for

1 Caucasians, and they are responsible for the 2 physical and introspection, going inside of 3 self. The black, of course, is African-Americans, 4 5 and they are responsible for the water. 6 red, of course, is us Native Americans, and 7 we're responsible for the land, or Mother Earth. 8 I beg you to listen to the learned speakers 9 that have presented today. I'm -- I've learned 10 so much. And I'd like to ask that you in your 11 position -- and I know you have a lot of 12 responsibility, especially in this current 13 administration. It must be very difficult. 14 But I ask you to look inside yourself, look 15 at your heart, and have the courage to do what's 16 right and protect the water and protect Mother Earth. 17 18 (Speaking in indigenous language.) 19 REGIONAL JUDICIAL OFFICER SUTIN: Thank you, 20 Ms. Rose. 21 Kathleen Jarvis. 22 KATHLEEN JARVIS: It's May 10th, 2017. Uranium mining EPA hearings. Public information 23 sessions and hearing for the proposed 24 25 Dewey-Burdock Project ISL mine near Edgemont.

The South Dakota Environmental Impact Statement, the SEIS, fails to consider connected actions.

My name is Kathleen Jarvis. I am born on a tiny island off the coast of Hiroshima just after the bomb was dropped. Comment: My concerns regarding the Dewey-Burdock Project are centered around the problems of artesian flow and interactions with the remediation of buried chemical warfare material located at the Black Hills Army Depot less than 10 miles to the south.

Furthermore, Powertech's experts propose land applications on river terraces and deep well injection into aquifers within the project boundaries under the sanction of EPA permits to be exempted from the Safe Drinking Water Act, SDWA 1977 and 1986.

Surface water flow in channels is ephemeral, except for perennial Beaver Creek. U.S. Army Corps of Engineers permits under Section 404 of the Clean Water Act will be required before conducting work in jurisdictional wetlands.

The Dewey-Burdock Project will transmit the applied and/or injected waste directly into the area of the Beaver Creek watershed within the

Upper Cheyenne River watershed of the Cheyenne River to flow eastward through the state of South Dakota and into the Missouri River, affecting the entire Missouri River Basin.

Refer to Exhibits A through L.

I actually prepared overheads. Pictures are worth a thousand words, if I might. Exhibit A is the Dewey-Burdock location, within the four-state -- Wyoming, South Dakota, Nebraska area.

Exhibit B is the Dewey-Burdock project in relationship to the national forests. Exhibit C is the Missouri River Basin, and I wish to point out Rapid City, South Dakota. This is the Dewey-Burdock in relationship to the Cheyenne River.

Exhibit D is the Beaver Creek watershed within the Upper Cheyenne River watershed.

Within that context, this is the Cheyenne River.

This is the Upper Cheyenne River watershed.

This is the Beaver Creek watershed, the Beaver Creek and the Pass Creek. This is

Dewey-Burdock.

Exhibit E, this is the actual boundaries of the project, Dewey-Burdock Project, showing

1 the -- excuse me, Beaver Creek coming through 2 the Chilson wellfield and the open pit Burdock. 3 These are all the tributaries, et cetera. In addition, I have for you Exhibit F, which 4 5 is a Google shot, a wide-angle shot of the 6 Beaver Creek. Please bear in mind the 7 relationship of these features with the Chilson 8 wellfield. 9 In addition, Exhibit G -- I apologize, I did 10 have this in overhead. We're technically 11 disabled right now. This is the drainage coming 12 off of the Black Hills across the Chilson 13 wellfield. 14 In addition, this is a closer shot in 15 relationship to the Beaver Creek and the Chilson 16 wellfield. Again, a closer shot of that with the Beaver Creek and the Chilson. 17 18 Exhibit J is the close-up shot of the actual 19 Chilson wellfield. You can see the pock marks 20 with the fact that it is a drainage area for the 21 Black Hills themselves. 22 What I have given as Exhibit K is the 23 relationship between the Burdock open pit mines and the Chilson wellfield --24

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REGIONAL JUDICIAL OFFICER SUTIN:

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1 Ms. Jarvis --2 KATHLEEN JARVIS: -- Burdock, et cetera. 3 REGIONAL JUDICIAL OFFICER SUTIN: Your time is up, so I need you to wrap up, please. 4 5 KATHLEEN JARVIS: If I might continue. 6 The Dewey-Burdock Project will transmit the 7 applied and/or injected waste directly into the 8 area of the Beaver Creek watershed. Within the 9 Upper Cheyenne River watershed of the Cheyenne 10 River to flow eastward throughout the state. 11 Water quality: Other areas are dealing with 12 primary and secondary water quality issues. 13 Southern Black Hills Water System Appraisal 14 Report. 15 For example, the town of Edgemont has 16 quality concerns with primary drinking water 17 standards relative to some categories of 18 radionuclides, example, alpha particles that can 19 result in increased risk of cancer. Edgemont 20 has shown a test of 17 milligrams per liter on 21 alpha particles, and the U.S. Environmental 22 Protection Agency limit is 15 milligrams per 23 liter. REGIONAL JUDICIAL OFFICER SUTIN: I'm sorry, 24 25 Ms. Jarvis. If we have time, you can come back

up, but I need to make sure that everyone has
the opportunity to speak.

KATHLEEN JARVIS: Okay. That's fine.

The last was the relationship of the wellfields with the Black Hills Army Depot.

That in and of itself has critical conditions to this project.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you very much.

Jennifer Belitz. Jennifer Belitz?

JENNIFER BELITZ: Jennifer Belitz. I've

been here for 17 years raising my two kids in

the southern Black Hills. I own property along

the Cheyenne River. I have animals that drink

from it. I have an Inyan Kara domestic well

that supplies household water and drinking water

for my livestock.

I haul my family's drinking water from a Minnelusa well. I have well log data with me from a neighbor's well that is in the same formation as my family well. And on the driller's notes it says: Note the flowing cave formation at the water level, in the Ferguson well, which is in the Minnelusa formation, which is what we get our drinking water from.

I do understand the interest a mining company would have in ISL at the Dewey-Burdock location. I do however feel that my water and the water of my community could be irreversibly harmed, besides the inadequate standards for the settling pond waste that could potentially contaminate the river, the Cheyenne River, and the much-utilized Angostura Reservoir, which is what the lady was -- before me was just talking about.

Today we're talking about the aquifers, the
Inyan Kara and the Minnelusa. Both we utilize.
For the Class III area permit for the Inyan
Kara, I believe that these proposed mining
activities pose a risk to my Inyan Kara water by
undetected or late-detected excursion, as I am
downgradient from the mining activity.

As far as the Class V area permit for disposing the in-situ mining waste fluids into the Minnelusa formation, the Minnelusa aquifer is a high-quality aquifer. It is well utilized in the southern Black Hills.

In addition to the domestic Minnelusa well that we haul our drinking water from, this aguifer sits approximately 1,000 feet below my

property, making it a potential drinking water source for my family and livestock for generations to come.

According to the atlas of the Black Hills, the Minnelusa aquifer flows from the proposed ISL site to my property. The contaminants injected are likely to pollute this potential drinking water source sometime in the future.

When I spoke with four hydrologists at the USGS on March 29, 2017, I learned the following: Yes, the flow model in the Atlas of Water Resources of the Black Hills does indicate that the Minnelusa flows from Dewey-Burdock to the southeast, which is where I live. However, they tell me that you can't judge just from the model of the flow system in that figure. The water in these aquifers can be really hard to track their flow.

In cave environments, such as the Minnelusa, which our well log data did say that there was a cave, the underground water almost flows like a river. There are local and regional impacts on some of the flow systems that are not indicated in the figure, and some of them are unknown.

According to a national data -- national

water database, there are minimum -- a minimum of 125 wells drilled into the Minnelusa aguifer in Fall River County, and I believe that there are more.

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My own family's well was drilled approximately 20 years ago, and there is no record of it in the current state DENR well log data site. Speaking with a DENR employee May 9, 2017, I was told that many well logs were not submitted, especially those during or before the 1980s.

We know that the Minnelusa aguifer and the Madison aguifer mix. In the Atlas of Water Resources of the Black Hills, again it indicates that Cascade Springs is mostly Madison water but with dissolved Minnelusa minerals. The Cascade is a utilized drinking water source.

The Cascade Falls is a highly visited swimming area attraction, and the 1890 irrigation system from this water provides many acres of hay, fruit, vegetable production, livestock watering ponds for area landowners, including my own pond, hayfields, and apple orchard.

Another publication by the USGS indicates

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the Minnelusa aquifer is hydrologically separated by the underlying Madison aquifer by shales. However, in many areas the Minnelusa is in hydraulic connection with the Madison.

Some information from deep well injection from North Dakota I found interesting because I grew up there, and I have witnessed a lot of the oil boom in that area. They are injecting waste into the ground, and I thought that maybe something we could compare to the Minnelusa here.

And I found it's very incomparable because they are injecting up to a mile down, well below any drinking water, and one of the requirements is that it has to be in a formation that is confined in the upper and lower zones.

REGIONAL JUDICIAL OFFICER SUTIN:

Ms. Belitz, your time is up. I need you to wrap up, please.

JENNIFER BELITZ: Okay. Just my summary up, so because of the scientific data, I believe that the EPA should not even consider permitting that Class V permit in the deep -- for deep injection into the Minnelusa. The Minnelusa is too shallow, it's unconfined, and it is known to

1 mix with a very important aquifer, and it itself 2 is an important and currently used aquifer. 3 Thank you. REGIONAL JUDICIAL OFFICER SUTIN: Thank you 4 5 very much. 6 Mark Sperlich. 7 MARK SPERLICH: Thank you for coming, and 8 thank you for hearing us. My name is Mark 9 Sperlich. I used to farm, eastern part of 10 South Dakota. And I know of a guy who just 11 moved here from Iowa, and he just said here a 12 month or so ago that a town in Iowa about the 13 size of Hot Springs was just informed that their 14 drinking water has been contaminated by 15 nitrates, probably because of surface runoff 16 from all the hog confinement areas. 17 So I'm thinking, if surface water can 18 contaminate an aquifer in Iowa, the injection 19 into the -- into the ground certainly can 20 contaminate it. 21 And I am not an expert on any hydrolysis and 22 all that. But I found it interesting that in 23 the very first article in Hot Springs Star, 24 there was -- where they talked about Powertech,

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there was also an article about a cleanup at a

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uranium mine in Colorado, I believe.

But they were talking about firsthand knowledge. The one guy said that the tools seem to have just been dropped as they left, and he could feel the heat through his gloves as he was trying to clean them up.

And I'm thinking, I don't think they planned on that. That was probably something they hadn't planned on or noticed or realized or something went wrong, and it took years for the state or the government to come up with a Super cleanup to clean that up, and it's unfortunate that they just walked away because then the taxpayer had to pay for it.

And with this being a foreign company, I don't see how we're going to be able to get them to clean it up, even if it were possible to clean it up.

So I would say while you have the ability,
make sure that you get enough fund money from
them beforehand so that it takes the profit away
from them so that if they do it properly,
supposedly, that they get their money back.
Otherwise, they are just going to consider it a
point of -- what do you call it -- operating

expense to pay the fine. And then they'll just leave, and we have to deal with it.

So please do not give this to them, and make it high enough so that it's mandatory. As much money as they plan on making, make them pay that ahead of time. If that would deter them from being sloppy, that would be money well spent.

Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you. Cindy Brunson.

CINDY BRUNSON: I'm a local rancher. I live at the Black Hills Ordnance Depot at Igloo,

South Dakota. We arrived in this area in 1987.

When I came to Edgemont, they -- the Tennessee

Valley Authority, they had hazmat suits on and

Geiger counters -- Geiger counters going around

Edgemont, picking up uranium tailings from the old site.

Unfortunately, we moved to a ranch unbeknowing [sic] that there was uranium mining done there, and there was holes after holes, borings that were never plugged. They -- you could drop a rock down them, and it sounded -- seemed like it went endlessly, you know. I have no idea what depth these were. But anyway,

nobody ever did anything to plug any of these holes.

So my concern is, there's a possibility of cross-contamination because of these borings, just like that man from the university over at Pine Ridge said, that, you know, they haven't expressed or told everybody about all the borings that were never plugged.

As a rancher, you know, first I would like the EPA to go back and have those areas cleaned up from the old uranium mining that was never ever cleaned up. And it's my understanding that the landowners won't let you back on because they feel they might be liable for the cleanup now that all these companies are gone.

I want to talk about the water. We have
Inyan Kara; that's what waters our whole ranch.
And the master plumber is right, there should
have been more ranchers here because the beef
industry in this county would go by the wayside
if there's no water.

The cultural resources that you were wondering about and stuff like that, as a rancher, when I want to put a pipeline and I'm several miles away from where you're going to

put this site, I have to do this study. And the reason why is because pre-historic Indians were in the area.

Well, then you just follow the trail, and it goes up to Craven Canyon, where the petroglyphs are. And anyway, that's relatively close to where the mining is. So I'm quite sure all the Natives that have spoken here really know that, you know, this is a sacred ground to them.

The water, it might not be a high quality, but I guarantee you, without it, this ranchland would sit vacant, because there is no way you can run a ranch without water.

The ranchers that kind of got on board with this in the area, why, they offered them high-dollar leases. Ranching isn't profitable every year. You can go to the bank with this added income of this lease, and you can look a lot better on your balance sheet.

A lot of promises were made that, Oh, if we damage the water, we'll clean it up. And to my knowledge -- I have a veterinarian out of Crawford, Nebraska, where they have the uranium mining down there, and he said that his water is so bad that he cannot even stand to go down in

the basement.

And he had a high quality, and they are supposed to stay with the water standards down there. So I hate to think what the Inyan Kara is going to look like or taste like or be like after you get done with this mining process.

My other concern, I am active with veterans.

I'm a life member of the VFW and American Legion

Auxiliary. And I'm concerned about our vets

because I don't really believe this uranium will

be used for a nuclear plant. I believe our men

or women are going to face it in a nuclear

attack or something like this. And so I'm not

interested in letting a foreign company take any

of our natural resources to use against us.

So thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you very much.

CINDY BRUNSON: Also, there was a lot of reference to this, and I would strongly suggest you get a copy of this because it would be very helpful to explain a lot of these comments that these people have been giving to you today.

REGIONAL JUDICIAL OFFICER SUTIN: Robert White Mountain.

1 ROBERT WHITE MOUNTAIN: Feels like I'm 2 walking up on a talent show or something. 3 (Speaking in indigenous language.) My name is Robert White Mountain. I'm a 4 5 Hunkpapa Lakota. On my mother's side, I come 6 from Sitting Bull, his tiyospaye. On my 7 father's side, I come from Rain in the Face. 8 And this lady that talked before me, I didn't 9 quite get her name, but she brought up a thing 10 that -- before I talk about that, I just want 11 you to -- I think everybody is going to raise 12 their hand if you're -- who drinks water? 13 everybody who drinks water, raise your hand. 14 think that's everybody. 15 So I had another question. Who all loves 16 water and would like to protect it? 17 All right. So my grandfather told me one 18 time, he said, "What is a Lakota?" And so he 19 told me what a Lakota is. Now, I'm a Hunkpapa 20 Lakota. That's what they call me. He said, 21 "What is a Lakota?" 22 A Lakota, he explained to me, is someone 23 that claims to be an ally to the spirit of all 24 that is. And water is part of all that is. 25 Water is part of all creation. So if we love

water, we want to protect water, we're all Lakota, and we're all related. We all breathe. We all drink. We all sleep. We all have red blood. We're all related. Even though we may be different colors, whatever it is, but we're all related.

And 36 years ago, I was a young man, and I was at Craven Canyon, and they have some petroglyphs there they were trying to destroy for uranium mining. And these petroglyphs tell history from the beginning to the end on how we are all related, how we all come from the same place. But that's a long story. I won't get into that.

But anyway, it just explains -- to me, just told me, you know, that through these petroglyphs -- we studied those for a long time. We also were put under siege for being there 36 years ago. And three -- two years ago, I was telling the story to some young kids around a fire over here in a cabin in the Black Hills here. And I was telling about how we were praying. All we did was pray for the water.

We prayed for the land, and we got completely surrounded by cops. We got

completely surrounded by vigilantes on horseback. Had 250 cops and vigilantes surrounding us because we wanted to pray for the land.

End result was -- end result of that whole thing was that I was able to stop the uranium mining right there at Craven Canyon, and we have saved that sacred site.

But now it's under fire again because of what's going on here today, and I really -- I really -- you know, I went up on the hill and I fasted and I prayed several times, a couple times. And I went up in the Badlands.

And after this last time I went up there and I fasted and prayed for four days and four nights, I come to realize, you know, though that -- what that teacher was telling me that, you know, some day throughout your spiritual life or your life, you'll realize that someday you are going to look at people and you're not going to see the color, that you're going to see that we're all related.

So after this last time I went up on the hill, I fasted and prayed. After that, I came down, and it was a whole different meaning for

me. So it was -- it was to a point where I could not see color.

I can look at that guy not as a white guy or black guy, I look at him because he's a human being, and we all are human beings and we all need water.

I'm sorry. You know, but the basic thing is we all -- we have so much alternative things that we can do besides destroy ourselves, besides destroy man. You know, I heard a gentleman talking, and he said, you know, the wind -- wind is bad because it kills birds. Solar is bad because you still have to use natural materials to make the panels, costs too much. But I never heard anything about magnetic.

REGIONAL JUDICIAL OFFICER SUTIN: Mr. White Mountain, your time is up. I think you need to wrap up.

anything about geothermal. Those are all renewable energies. They don't stop, they are not expensive, and they don't cost -- you know, if you use -- and they are all renewable. We don't have to kill ourselves over it.

So I just -- you know, to conclude here, you know, that this land was all taken illegally.

That's all going to be settled eventually, but that's not for us to say right now because it was all taken illegally. We all know that.

But I won't talk about that here, so -- but the thing is, what we're talking about right now is that we're all human. We are all of the human family. We all have to live, and we all want to live together as one family. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you very much.

Jeff LaRive.

JEFFREY LARIVE: Show biz.

So my name is Jeffrey LaRive. I'm fourth generation here in Hot Springs. I admire the preparedness of the previous speakers. I am not prepared. But I am here to say that once this resource is extracted and the coffers have been lined for Powertech, they will move on. They are not concerned about your drinking water or your children's drinking water or your quality of life here in Hot Springs.

They will be living in a gated community in Vail or an alpine lodge in Switzerland. So if

1 you're mistaking this for energy independence or 2 caring about our community, you're kidding 3 yourselves. This is about using us and moving on. And that's all I can see. Thank you. 4 5 REGIONAL JUDICIAL OFFICER SUTIN: Thank you. 6 We are close to the 8:00 hour. I know that 7 there were several folks that wanted to get back 8 up and speak. I would ask that if you have more 9 to say that you come tomorrow to Edgemont. 10 If there is someone who is not able to come 11 to Edgemont tomorrow, I will take one more 12 speaker, and we'll end there. 13 Have you spoken before, ma'am? 14 LINSEY MCLEAN: Yes. 15 REGIONAL JUDICIAL OFFICER SUTIN: Ms. McLean, come on up. 16 LINSEY MCLEAN: I'll be brief. 17 18 My name is Linsey McLean. I know that the 19 EPA has, to date, approved all of the 20 applications that have come before you for Class III and Class V UIC wells. And I know that all 21 22 of these wells have commonalities that are 23 requirements for this approval. 24 However, this Dewey-Burdock area has five 25 other factors that would preclude this permit

that other sites already permitted do not have and that makes this site very different.

Number one, there's no concentrated roll-front left to mine profitably. It's all been mined out by the TVA a long time ago.

Number two, no ability to dewater the area, and that was determined by the TVA also and why they abandoned the site, so that there's no ability to confine the communicating aquifers.

Number three, the old boreholes were actually holes that they actually were going to use as their wellfield that they abandoned, and that makes this situation even worse.

Number four, the proximity of Igloo, which is the most dangerous collection of unstable nerve gasses and old, unstable munitions in the world buried there. Igloo is downgradient of Dewey-Burdock.

Moving wastewater will destabilize Igloo and pick up even more toxins and move them and likely cause an event of epic proportions.

And finally, number five, the open boreholes and the fence posts and at least some of them have allowed contamination to the aquifer of microorganisms that are known to organify metals

and make them unrecoverable by ion exchange.

With the history of now high levels of naturally occurring organic uranium in other mine sites where they're finding this where there was no contamination by microorganisms like Dewey-Burdock, this situation is very relevant.

And so with the low levels of uranium in the proposed site, coupled with the high proportion of unrecoverable uranium likely, this will not be a profitable mining operation. And so if there ever was a case for denying a permit, this is one. Thank you.

REGIONAL JUDICIAL OFFICER SUTIN: Thank you.

I want to thank you, everyone, for coming to testify today. We really do appreciate and want all your comments.

Please come tomorrow, and we will be in Edgemont, same format. 1:00 to 2:00 we will have an information session. From 2:00 to 5:00 will be an open hearing, and we'll take testimony. We'll take a break from 5:00 to 6:00, and then more testimony from 6:00 to 8:00. So please come if you have more to say.

At this point, I will conclude this hearing.

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And the hearing is now closed. Thank you again
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             for coming.
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                 (Proceeding was concluded at 8:02 p.m.)
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                       CERTIFICATE
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      STATE OF SOUTH DAKOTA }
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                               SS:
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           I, Jacqueline K. Perli, Registered Professional
      Reporter, do hereby certify that said proceedings were
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      taken by me stenographically and thereafter reduced to
      typewriting under my supervision; that the foregoing
 8
      is a true and accurate record of the proceeding to the
      best of my understanding and ability.
 9
           I further certify that I am neither counsel for,
10
      related to, nor an employee of any of the parties to
      this case and have no interest, financial or
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      otherwise, in its outcome.
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13
      Dated this 31st day of May, 2017.
14
      /s/ Jacqueline K. Perli
15
      Registered Professional Reporter
      Black Hills Reporting
      1601 Mt. Rushmore Rd., Ste. 3280
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                     57701
      Rapid City, SD
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      605.721.2600
      Notary Public
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      My commission expires: May 9, 2019
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